CLIMAX MOLYBDENUM COMPANY
A subsidiary of phelps dodge Corporation

Climax Molybdenum Company
P.O. Box 220
Fort Madison, Iowa 52627
(319) 463-7151

April 2, 2003

VIA OVERNIGHT MAIL

Mr. James Aycock
RCRA Enforcement and State Programs Branch
U.S. Environmental Protection Agency, Region VII
901 North 5th Street
Kansas City, Kansas 66101

Re: Response to the United States Environmental Protection Agency Section 3007 Information Request for Climax Molybdenum Company, Fort Madison, Iowa Facility

Dear Mr. Aycock:

Climax Molybdenum Company ("Climax") received a request for information on February 7, 2003, issued by the U.S. Environmental Protection Agency ("EPA") dated February 4, 2003 (the "Request"). On February 14, 2003, EPA granted an extension of the time for responding to the Request to April 7, 2003.

Contained in the enclosed binder is Climax's response to the Request. Climax found a few of the requests to be very burdensome, overly broad, vague, or confusing. Nevertheless, this response represents Climax's best effort within the time provided to submit information and documents responsive to the Request. Climax reserves the right to supplement its response should additional information become available to it in the future.

The enclosed binder contains three sealed envelopes that contain documents that Climax believes are confidential. Each page of these documents is stamped "confidential." Each envelope contains a statement supporting the claim of confidentiality. Also enclosed with this letter is an index of the confidential documents.

We trust that this response satisfies EPA's request for information. Provided below my signature is the certification requested in the Request. Should you wish to discuss this matter or need further information, please contact me or Shelly Heston.

Very truly yours,

William Mitchell

By:
William Mitchell
General Manager
Climax Molybdenum Company

452876
RCRA RECORDS

CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information) and all documents submitted herewith, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

William Mitchell

William Mitchell

Dated 4/2/03

covered by the Bevill mixture rule until the mixture enters into the roaster (40 C. F. R. 261.3(a)(2)(iii)).

7. Identify all solid wastes or hazardous waste. See Section 7.

8. Exempt wastes.

   See response to question 7.

9. Identify all wastes in your response to 7 that have been disposed of off-site in the last 5 years. See Section 9.

10. Identify each material placement or storage area at the Fort Madison facility.

    Utility Pond
    Used Acetone Accumulation Area
    Used Oil Accumulation Tanks
    Fluorescent Bulb Accumulation Area/Sewage Storage and Treatment Facility
    Spray Can Residue Accumulation Area
    Gypsum Ponds
    Feedstock Storage Area
    Product Storage Area
    Stormwater Collection and Discharge Areas
    Landfill

    All areas are described in Section 10.

11. Identify all materials which you assert are recyclable or are being recycled, are being reclaimed, are reclaimed, or are secondary materials from mineral processing or brought on site for processing from which values will be recovered. See Section 11.

12. Identify all materials listed in your response to question 11 that are brought in from off-site for recycling or reclamation at your Facility, and all materials that are sent off-site for recycling or reclamation.

    We currently do not have any materials brought from off-site for recycling or reclamation. There are not any materials being sent off-site for recycling or reclamation other than those identified in response to question 7.

Index of Confidential Documents

Name of Document (with pages in length)	Location in Binder
Fort Madison Flow Diagram (three pages)	Tab 4
Water Flow Schematic (one page)	Tab 4
Climax Molybdenum Company List of Feedstocks, Intermediate Products, and Final Products (one page)	Tab 4
Climax Molybdenum Company List of Feedstocks, Intermediate Products, And Final Products (one page)	Tab 5
Climax Molybdenum Company Mass Balance (Pounds) (two pages)	Tab 5
Roaster Plant Operating Manual Index (two pages)	Tab 5
Acid Plant Operating Manual Index (two pages)	Tab 5
Chemical Plant Operating Manual Index (one page)	Tab 5
Molysulfide Procedures Manual Index (two pages)	Tab 5
Pure Oxide Operating Procedures Manual Index (one page)	Tab 5
Response to Question 11 (one page)	Tab 11
Climax Molybdenum Company Rhenium Analytical Table (two pages)	Tab 11

Shelly Heston, Environmental Manager, prepared all documents for this request unless otherwise noted. Shive Hattery prepared the schematic diagrams of the facility for this request. The flow diagram for the Rhenium Plant was prepared by Jim Cole, Technical Services Manager and is part of the operating manual for this plant. The master copy of this manual is kept in the Quality Assurance Manager's office. Various people in the Technical Services and Operations groups prepared the operating manual indexes included for question 5. The master copies of these manuals are kept in the Quality Assurance Manager's office. Copies of the waste determinations in section 7 and shipping manifests in section 9 are kept under the control of the Environmental Manager.

1. Definition of terms.
   a. Concentrate: Molybdenum disulfide material received at Fort Madison for processing.
   b. Molybdenum Trioxide: the product of oxidation of molybdenum sulfide concentrate.
   c. ADM – Ammonium Dimolybdate
   d. AOM- Ammonium Octamolybdate
   e. AHM – Ammonium Heptamolybdate
   f. NaMo – Sodium Molybdate
   g. Molysulfide® – Product sold from Fort Madison often used as a lubricant.

1. Names and titles of primary person's responsible for environmental compliance.

   William Mitchell – General Manager. Overall responsibility for the site.

   Gary Glasgow – Operations Manager. Overall responsibility for site operations.

   Shelly Heston – Environmental Manager. Overall responsibility for the site environmental programs.

2. Provide schematic diagram of the facility. See Section 3.

   The tungsten plant ceased operation in 1989 and the plant was dismantled in 1993. A gypsum pond was closed in 1995.

4. Provide a flow diagram for each Process. See Section 4.

5. Provide a written description of each Process. See Section 5.

   All of the operating manual indexes are kept with the master copy of the manuals in the Quality Assurance Manager's office.

6. Identify all activities which are extraction, beneficiation, or mineral processing.

   All feedstocks are beneficiation materials as well as the storage location of those feedstocks. Once the feedstock enters the roasters they becomes mineral processing materials. All recyclable materials that are placed back into the roaster via feedstocks are Bevill materials

2. Names and titles of primary person's responsible for environmental compliance.

   William Mitchell – General Manager. Overall responsibility for the site.

   Gary Glasgow – Operations Manager. Overall responsibility for site operations.

   Shelly Heston – Environmental Manager. Overall responsibility for the site environmental programs.

4. Provide a flow diagram for each Process. See Section 4.

STATEMENT OF CONFIDENTIALITY
QUESTION 4, TAB 4

Climax Molybdenum Company ("Climax") hereby asserts a claim of confidentiality over the following documents in their entirety: "Fort Madison Flow Diagram" (three pages), "Water Flow Schematic" (one page), and "Climax Molybdenum Company List of Feedstocks, Intermediate Products, and Final Products" (one page) (collectively the "Documents"). The Documents are enclosed in a sealed envelope under Tab 4 of the binder in response to question 4 of the Request. Climax is providing the Documents to the U.S. Environmental Protection Agency ("EPA") in response to the information request issued by EPA pursuant to Section 3007(a) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.S. § 6927(a) (2002), and dated February 4, 2003. The request pertains to the Climax Molybdenum Company Fort Madison Facility in Fort Madison, Iowa (the "Facility").

RCRA Section 3007(b) states that EPA shall not make available to the public any records, reports, or information obtained by EPA through a Section 3007(a) information request upon a satisfactory showing that such records, reports, or information are entitled to protection under 19 U.S.C.S. § 1905 (2003).[1] Therefore, pursuant to Section 3007(a) and 40 C.F.R. § 2.208(e) (2002), Climax states the following:

1. The Documents should be treated as confidential on a permanent basis.

2. The information contained in the Documents will not become stale because (1) Climax intends to use the processes described in the flow diagrams for the foreseeable future, and (2) the information contained in the Climax Molybdenum Company Mass Balance will continue to reflect the sources of feedstock for the facility and the disposition of its products for the foreseeable future.

3. Access to the information contained in the Documents is confined to a select number of individuals at the Facility and only a few copies of these Documents are available.

4. To our knowledge, the information contained in the Documents has never been disclosed to any person other than Climax's agents and employees.

5. To our knowledge, no government body has made a determination as to the confidentiality of the information contained in the Documents.

6. To our knowledge, the information contained in the Documents cannot be found in any publicly available material and there are no means by which a member of the public could obtain access to the information.

7. The Facility is the largest producer in the world of numerous molybdenum products. The Documents contain sensitive and detailed information concerning (1) the flow of

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[1] 19 U.S.C.S. § 1905 protects from disclosure documents containing information which "concerns or relates the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association."

materials through the Facility, (2) the sources of feedstock for the Facility, and (3) and the disposition of its products. Public disclosure of the Documents would give Climax's competitors access to confidential operating procedures and confidential marketing information, which provide Climax with a competitive advantage in the molybdenum production industry.

8. The information contained in the Documents is not submitted voluntarily.

5. Provide a written description of each Process. See Section 5.

   All of the operating manual indexes are kept with the master copy of the manuals in the Quality Assurance Manager's office.

7. Identify all solid wastes or hazardous waste. See Section 7.

Question 7.

Hazardous Waste

Used Acetone from the lab
Isobutyl Alcohol from the lab
Spray can residue
Universal waste fluorescent lamps
Lab pack
Miscellaneous – waste paint
Used Antifreeze/Used Oil mixture

Nonhazardous Waste

Computers
Used antifreeze
Used oil
Gypsum
Used oil filters
Refractory brick from the roaster
Waste sulfur
Leachate from the landfill
Wastewaters sent to NPDES discharge point
Part washer solvent
Used filters
Supersaks
Sanitary Sewage sludge
General trash
Recycled paper, cardboard, wood
Sand/Sodium Hydrosulfide (45%) mixture
Used oil and absorbant from maintenance
Cleaner/molybdenum/wipes mixture from molysulfide
Miscellaneous PCB contaminated material such as capacitors

Hazardous Shipments

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing Date: 18-Feb-98

Receiving Number: 980209-4878

Items Received and Recycled

Quantity	Description
178	Fluorescent 4' and Under
7	High Intensity Discharge (HID)
9	Fluorescent Greater than 4'

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY

DATE February 18, 1998

Please print or type. (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. I A D 0 0 0 2 2 2 6 5 3	Manifest Document No. 05021	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENIUM COMPANY
2598 HIGHWY 61 SOUTH PO BOX 220 FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X HAZARDOUS WASTE, SOLID, n.o.s. (Contains Mercury), 9, NA3077, PGIII (D009)	002	CF	00176	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171. D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

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: X JOSEPH L. BARTHOLOMEW | Signature: X Joseph L. Bartholomew | Month Day Year: 10 20 91 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: R. CHARLES DOUGLAS | Signature: Charles D. Douglas | Month Day Year: 10 20 91 98

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: | Signature: Joseph L. Bartholomew | Month Day Year: 10 29 91 98

FACILITY

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: SUSAN STITZEL | Signature: Susan Stitzel | Month Day Year: 10 29 91 98

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. | Manifest Document No. | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A D 0 0 3 1 0 3 8 2 7

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5145 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number: I A D 0 0 0 1 0 9 8 2 7

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone: 515-244-7357

GENERATOR

	HM	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X					K	
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

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 | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

980209-4878

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627

SHIPPING OR P.O. #	DATE:		PICKUP		DELIVERED
FT2428	2/9/98	X			

QUANTITY	LAMP TYPE
178	Fluorescent ≤ 4' and Compacts
9	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
7	High Intensity Discharge
Est:____Lbs.	Crushed Fluorescent Lamps (Act_____Lbs.)
	Other _____
193	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190)___	4'(80)___	8'___	Steel___
PICKUP	4'(190)___	4'(80)___	8'___	Steel___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
		Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
		Capacitors
		Other Items: _____
		_____
		_____
		◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
	◀ TOTAL UNITS RECEIVED		

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as ...d for recycling. The packages contain the ...erials as described and do not contain any non-described material.

Customer or Generator Authorized
By: _____
Date: 2-09-98 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: _____

A-TEC RECYCLING INC.

LAND DISPOSAL RESTRICTION FORM

745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

GENERATOR NAME: CLIMAX MOLYBDENIUM

MANIFEST NUMER: 05021

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41 CIRCLE ONE		IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
D009	Low Hg	NWW	YES	NO	NLDBR
	High Hg		YES	NO	"fb"
			YES	NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Joseph L. Bartholomew Certify

Print Name: Joseph L. Bartholomew Date: 02-09-93

Printed on recycled paper

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH **EPA Form 8700-22 (6-89)** Form Approved. OMB No. 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 | Manifest Document No. 25153 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: CLIMAX MOLYBDENUM CO
598 HWY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627
Generator's Phone ( ) 319 463-7151
Location if Different:

A. Illinois Manifest Document Number: IL 5851332 MANIFEST FEE PAID
B. Illinois Generator's ID 9190019999
C. Illinois Transporter's ID
D. ( ) Transporter's Phone 800 669-5740 1123

5. Transporter 1 Company Name: SAFETY-KLEEN CORP
6. US EPA ID Number: ILD 984908202
7. Transporter 2 Company Name
8. US EPA ID Number
E. Illinois Transporter's ID
F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address: SAFETY-KLEEN CORP. 000654
633 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913
G. Illinois Facility's ID 0319690006
H. Facility's Phone 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	Total Quantity	Unit Wt/Vol	I. Waste No.
a. WASTE ACETONE 3 UN1090 PG II (F003)(ERG#127)	001	DM	00030	G	EPA HW Number X X F 0 0 3 Authorization Number
b.					EPA HW Number X X Authorization Number
c.					EPA HW Number X X Authorization Number
d.					EPA HW Number X X Authorization Number

J. Additional Descriptions for Materials Listed Above: (A) D001

K. Handling Codes for Wastes Listed Above in Item #14: M061

15. Special Handling Instructions and Additional Information
MFST R/T# 92708227 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
SKDOT# A: 533 B: C: D:

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, and Illinois 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	Signature	DATE Month Day Year
JOSEPH L. BARTHOLOMEW	Joseph L. Bartholomew	02 10 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	DATE Month Day Year
Johnnie Ferrel	Johnnie Ferrel	02 10 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	DATE Month Day Year

FACILITY

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	Signature	DATE Month Day Year
ESTHER MIKULA	Esther Mikula	2 12 98

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

A\1616195\1051348

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89)

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
Form Approved. OMB No. 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 25153
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
SLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627
Location if Different:

A. Illinois Manifest Document Number: IL 5851332 MANIFEST FEE PAID
B. Illinois Generator's ID: 9190019999
C. Illinois Transporter's ID:
D. ( ) 1123 Transporter's Phone: 800 669-5740
E. Illinois Transporter's ID:
F. ( ) Transporter's Phone:
G. Illinois Facility's ID: 0310690006
H. Facility's Phone:

4. Generator's Phone: 319 463-7151
5. Transporter 1 Company Name: SAFETY-KLEEN CORP.
6. US EPA ID Number: ILD 984908202
7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address: 000654
SAFETY-KLEEN CORP.
633 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE ACETONE 3 UN1090 PG II (F003)(ERG#127)	001	DM	00030	G	EPA HW Number: XX F003; Authorization Number:
b.					EPA HW Number: XX 000161; Authorization Number:
c.					EPA HW Number: XX; Authorization Number:
d.					EPA HW Number: XX; Authorization Number:

708 849-4850

J. Additional Descriptions for Materials Listed Above
1A) D001

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
MFST R/T# 92708227 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
SKDOT# A: 533 B: C: D:

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, and Illinois 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: Joseph J. Bartholomew
Signature: Joseph J. Bartholomew
DATE Month Day Year: 02 10 98

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Johnnie Ford
Signature: Johnnie Ford
DATE Month Day Year: 02 10 98

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

GENERATOR / TRANSPORTER / FACILITY

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

COPY 6. GENERATOR COPY

A)1616195/1051848

81363-R4747 SAFETY-KLEEN CORP. PAGE 1 OF
NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

FROM: SAFETY-KLEEN CORP.,
633 E 133TH ST
DOLTON, IL 60419

EPA ID: ILD980613913

UNDER MANIFEST NUMBER 25153/EL 5851382 LINE NUMBER
THE GENERATOR NOTED BELOW IS SHIPPING TO YOU A RESTRICTED WASTE UNDER FEDERAL AND STATE LAND DISPOSAL RESTRICTION REGULATIONS.
IN ACCORDANCE WITH THESE REGULATIONS, THE GENERATOR HEREBY PROVIDES NOTICE THAT THE WASTE IS RESTRICTED AND THE EPA WASTE CODES AND APPROPRIATE TREATMENT STANDARDS ARE AS FOLLOWS:

HAZARDOUS WASTE CODES: F002 D001

TREATABILITY GROUP: NONWASTEWATERS

CALIFORNIA LIST PROHIBITED WASTES ***	PROHIBITED LEVEL AND TREATMENT STANDARD
HALOGENATED ORGANIC COMPOUNDS	1000 MG/L INCIN*
F001, F002, F003, F004 AND/OR F005* SPENT SOLVENT WASTES CONTAINING HALOGENATED HAZARDOUS CONSTITUENTS	TREATMENT STANDARD CONCENTRATION (TOTAL MG/L FOR WW, TOTAL MG/KG FOR NWW UNLESS NOTED AS "TCLP")
CARBON TETRACHLORIDE	160
1,1,2-TRICHLOROETHANE **	2.6
TRICHLOROFLUOROMETHANE ***	6.0
1,1,1-TRICHLOROETHANE ***	5.6

EPA WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY OR REGULATED HAZARDOUS CONSTITUENT	TREATMENT STANDARD CONCENTRATION OR TECHNOLOGY CODE
D001	HIGH TOC IGNITABLE CHARACTERISTIC WASTE.	RORGS; OR CMBST **

NOTES: * THESE TREATMENT STANDARDS DO NOT PRECLUDE SOLVENT RECOVERY OR USE AS FUEL PRIOR TO LAND DISPOSAL.
** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 12-19-94.
*** TREATMENT STANDARDS APPLICABLE IN CERTAIN HSWA-AUTHORIZED STATES AND MEET UNIVERSAL TREATMENT STANDARDS
**** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 7-8-96.

GENERATOR DATE: CLERK TOLLBOOTH # EPA ID: IL0000220587

PRINT OR SIGNATURE (OPTIONAL): _____

TITLE (OPTIONAL): _____

FACILITY TSD FACILITY NUMBER: 1851031 CONTROL NUMBER: 1615 **

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 24-Mar-98

Receiving
Number: 980320-5148

Items Received and Recycled

Quantity	Description
567	Fluorescent 4' and Under
129	Ballasts - non PCB

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Lloyd

DATE March 24, 1998

Please print or type. (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.: IAD000222653
Manifest Document No.: 05218
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FORT MADISON, IA 52627
4. Generator's Phone (319) 463-2222

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.
6. US EPA ID Number: IA0000109827
C. State Transporter's ID
D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313
10. US EPA ID Number: IA0000109827
G. State Facility's ID
H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, solid n.o.s. (contains mercury), 9, NA3077, PG III (DOA)	X	003	CF	00198	K	
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PG II (EPA waste code PCB-2) (ERG 171)	X	001	DM	00323	K	
c. Ballast Non PCB		001	DM	00137	K	
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171. D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

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: X Joseph L. Bartholomew
Signature: X Joseph L. Bartholomew
Month Day Year: 03 20 98

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Richard Douglas
Signature: Richard Douglas
Month Day Year: 03 20 98

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

19. Discrepancy Indication Space
Item 13b Total Quantity 323K is a field estimate, Actual measured weight is 279K. LY

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Larry Young
Signature: Larry Young
Month Day Year: 03 20 98

GENERATOR

TRANSPORTER

FACILITY

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.: I A D 0 0 0 0 2 2 6 5 3
Manifest Document No.: 05211

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
[illegible] COMPANY
[illegible] HIGHWAY 61 [illegible] PO BOX 220 [illegible] MADISON, IA [illegible]

4. Generator's Phone (319) [illegible]

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	[illegible]	X	[illegible]	[illegible]	[illegible]	K	
b.	[illegible]	X	[illegible]	[illegible]	[illegible]	K	
c.	[illegible]		[illegible]	[illegible]	[illegible]	K	
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-[illegible] OR 90NAERG-171 D.O.T. ERG-[illegible] AND LAND BAN NOTIFICATION ARE ATTACHED. EMERGENCY TELEPHONE NUMBER 800-551-4912.

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: [illegible]
Signature: [illegible]
Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

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
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

980320-5148

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH P. O. BOX 220 FORT MADISON, IA 52627	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH P. O. BOX 220 FORT MADISON, IA 52627

SHIPPING OR P.O. # FT2428 DATE 3/20/98

PICKUP | DELIVERED

QUANTITY	LAMP TYPE
5760	Fluorescent ≤ 4' and Compacts
	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
	High Intensity Discharge
Est:____Lbs.	Crushed Fluorescent Lamps (Act_____Lbs.)
	Other _____
5760	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190)___4'(80)___8'___Steel___
PICKUP	4'(190)___4'(80)___8'___Steel___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
200	28	Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
		Capacitors
		Other Items: _____
200	28	◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)

◀ TOTAL UNITS RECEIVED

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: [signature]
Date: 3-20-98 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

A-TEC RECYCLING INC.

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

LAND DISPOSAL RESTRICTION FORM

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 05218

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	Low Hg	NWW	YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Joseph L. Bartholomew Certify

Print Name: Joseph L. Bartholomew Date: 3-20-98

Printed on recycled paper

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P.O. Box 8913 Little Rock, Arkansas 72219-8913
Telephone 501-682-0744

ENPAK 1

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

Form Approved. OMB No. 2050-0039. EXPIRES 9-30-99

AR-11-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: I A D 0 0 0 2 2 2 6 5 3
Manifest Document No.: 0 5 4 3 6
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627
ATTN: TOM ANDERSON

4. Generator's Phone (319) 463-7151 ( ) -

A. State Manifest Document Number: AR- 905436
B. State Generator's ID:

5. Transporter 1 Company Name: Division Transport Inc.
6. US EPA ID Number: A R D 0 6 9 7 4 8 1 9 2
C. State Transporter's ID: PC 0708 H 010
D. Transporter's Phone: (800) 844-7173

7. Transporter 2 Company Name: DartTrucking Company Inc.
8. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5
E. State Transporter's ID: PC 0902 H 205
F. Transporter's Phone: (800) 327-8866

9. Designated Facility Name and Site Address
ENSCO
309 AMERICAN CIRCLE
EL DORADO, AR 71730
10. US EPA ID Number: A R D 0 6 9 7 4 8 1 9 2
G. State Facility's ID:
H. Facility's Phone: (800) 844-7173

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste 1,1,1-TRICHLOROETHANE, 6.1, UN2831, PG III (Devcon Cleaner) (pf: 728085), (), (erg: 160)	0 0 1	D F	E S T 0 0 0 7 5	P	U228
b. Waste, FLAMMABLE LIQUIDS, N.O.S., 3, UN1993, PG II (Methyl Ethyl Ketone, Diisocyaates) (pf: 728086), (), (erg: 128)	0 0 1	D F	E S T 0 0 0 7 5	P	D001
c.					
d.					

J. Additional Description for Materials Listed Above
** 11A: DEVCON CLEANER ; 1x30-Gal. ** 11B: EPOXY RUBBER ; 1x30-Gal. *

K. Emergency Response Information:
CHEMTRAC
(800) 424-9300

if no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information
Chicago Enpak Job# 53177-17. / ERG Guide 160 , 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 and Arkansas state 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.

GENERATOR

Printed/Typed Name: Joseph L. Bartholomew
Signature: Joseph L. Bartholomew
Month Day Year: 10 5 1998

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy Linneman
Signature: Timothy Linneman
Month Day Year: 10 5 1998

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

FACILITY

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:
Signature:
Month Day Year:

EPA Form 8700-22 (Rev. 9-88) Previous edition is obsolete.

NOTICE: THE ORIGINAL AND NOT LESS THAN TWO (2) COPIES MUST MOVE WITH THE HAZARDOUS WASTE SHIPMENT. ONCE DELIVERED, THE TREATMENT/STORAGE/DISPOSAL FACILITY MUST RETURN THIS ORIGINAL COPY TO THE GENERATOR.

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P.O. Box 8913 Little Rock, Arkansas 72219-8913
Telephone 501-682-0744

6

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

Form Approved. OMB No. 2050-0039. EXPIRES 9-30-99

AR-11-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
I A D 0 0 0 2 2 2 5 5 3	0 5 4 3 6		

GENERATOR

Generator's Name and Mailing Address
CLIMAX MOLYBDENUM
3398 HIGHWAY 61 SOUTH
FORT MADISON IA 52627
ATTN: TOM ANDERSON

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number: AR- 905436

B. State Generator's ID:

5. Transporter 1 Company Name: Division Transport Inc.
6. US EPA ID Number: A R D 0 0 8 9 7 4 8 1 3 2

C. State Transporter's ID: PC 0708 H 010

D. Transporter's Phone: (800) 844-7173

7. Transporter 2 Company Name: DartTrucking Company Inc.
8. US EPA ID Number: K S D 0 0 9 9 6 5 3 2 5

E. State Transporter's ID: PC 0902 H 205

F. Transporter's Phone: (800) 327-8866

9. Designated Facility Name and Site Address
SUSCO
309 AMERICAN CIRCLE
EL DORADO AR 71730
10. US EPA ID Number: A R D 0 5 9 7 4 2 1 9 2

G. State Facility's ID:

H. Facility's Phone: (800) 844-7173

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste 1 1 1-TRICHLOROETHANE, 9.1 UN2831 PG III (Devcon Cleaner) (pf: 723085) () (erg: 160)	0 0 1	DM	0 0 0 7 5 EST	P	U228
b. Waste FLAMMABLE LIQUIDS, N.O.S. 3 UN1993, PG II (Methyl Ethyl Ketone, Diisocyanates) (pf: 723086) () (erg: 128)	0 0 1	DM	0 0 0 7 5 EST	P	D001
c.					
d.					

J. Additional Descriptions for Materials Listed Above: ~~11A: DEVCON CLEANER ; 1x30-Gal.~~ ** 11B: EPOXY RUBBER ; 1x30-Gal. *

K. Emergency Response Information:
CHEMTRAC
(800) 424-9300

if no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information
Chicago Empak Job# 53177-17. / ERG Guide 160 128

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 and Arkansas state regulations.
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Printed/Typed Name	Signature	Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	05	17	93

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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	Signature	Month	Day	Year

EPA Form 8700-22 (Rev. 9-88) Previous edition is obsolete.

GENERATOR INITIAL COPY

ensco

I[illegible]SP[illegible]I[illegible]S[illegible]C[illegible]N [illegible]TIFICATION FORM
Fo[illegible] [illegible] Standards Found in 40 CFR 268

Gen[illegible]or Name: CLIMAX MOLYBDENUM
EPA [illegible] 653

Manifest No.: 05436
State Doc.#: AR-905436

ENPAKGROUP

Seq.	WMDS	Waste Water	Lab Pack	Drums/*Waste Codes/UHC's	Special Conditions
11A	728085	N	N	/ U228 / 1,1,1-Trichloroethane*	None
11B	728086	N	N	/ D001(High TOC) / Methyl Ethyl Ketone*	None

N=Non Waste Water Y=Waste Water E=Eligible under 40CFR268.42(c) N=Not Eligible

*Regulated Hazardous Constituents, not the Underlying Hazardous Constituents (UHC's), must be identified for waste streams which carry the EPA Waste Codes, F001-F005, F039 and for California List wastes (40CFR268.32). UHC's must be identified for D001 (if Not Treated by CMBST or RORGS), D002, D012-D043 (if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities). Wastewater forms of D012-D017 do not require that UHC's be identified. List the constituents on the corresponding line or include a marked copy of the Universal Treatment Standards Sheet for each affected WMDS.

Special Conditions:

A. Waste Requiring No Further Treatment
B. Lab Pack Waste Qualifying for Alternative Treatment under 40 CFR 268.42(c)
C. Hazardous Waste Debris subject to standard treatment requirements, 40 CFR 268.40.
D. Hazardous Waste Debris subject to alternative standards in 40 CFR 268.45. (List Contaminants)
E. Waste Qualifying for Exemption and not subject to Land Disposal Restriction (Explain)
F. Waste already treated to remove a hazardous characteristic which requires additional treatment for underlying hazardous constituents. List constituents
G. Waste already treated to remove a hazardous characteristic and all the underlying hazardous constituents have been treated to levels in 268.48
H. For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY: This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 subpart FF.

Waste analysis is attached where available, otherwise, the information contained herein is based upon my thorough knowledge of the waste(s).

I hereby certify that I believe that the information I submitted is true, accurate and complete.

Signature Joseph L. Bartholomew Title ENVIRONMENTAL TECHNICIAN Date 5/19/98

Waste Streams Identified by Special Condition A:

I certify under penalty of law that I personally have examined and am familiar with the wastethrough analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Waste Streams Identified by Special Condition B:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes which have not been excluded under appendix IV to 40 CFR 268. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Waste Streams Identified by Special Condition F:

I cer[illegible]der penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the haza[illegible] characteristic. This [illegible]decharacterized waste contains underlying hazardous constituents that require further treatment to

including the possibility of a fine and imprisonment.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

ensco

ENPAK GROUP

Was the Wastestreams Identified by Special Condition G:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic, and that underlying hazardous constituents, as defined in 268.2, have been treated on-site to the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P.O. Box 8913 Little Rock, Arkansas 72219-8913
Telephone 501-682-0744

860562

ENPAK

1

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

Form Approved. OMB No. 2050-0039. EXPIRES 9-30-99

AR-11-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
I A D 0 0 0 2 2 6 5 3	0 5 4 3 6		

GENERATOR

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627
ATTN: TOM ANDERSON
( ) -

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number: AR- 905436

B. State Generator's ID:

5. Transporter 1 Company Name: Division Transport Inc.

6. US EPA ID Number: A R D 0 6 9 7 4 8 1 9 2

C. State Transporter's ID: PC 0708 H 010

D. Transporter's Phone: (800) 844-7173

7. Transporter 2 Company Name: DartTrucking Company Inc.

8. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

E. State Transporter's ID: PC 0902 H 205

F. Transporter's Phone: (800) 327-8866

9. Designated Facility Name and Site Address
ENSCO
309 AMERICAN CIRCLE
EL DORADO, AR 71730

10. US EPA ID Number: A R D 0 6 9 7 4 8 1 9 2

G. State Facility's ID:

H. Facility's Phone: (800) 844-7173

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste 1,1,1-TRICHLOROETHANE, 6.1, UN2831, PG III (Devcon Cleaner) (pf: 728085), (), (erg: 160)	001	DF	EST 00075	P	U228
b. Waste FLAMMABLE LIQUIDS, N.O.S., 3, UN1993, PG II (Methyl Ethyl Ketone, Diisocyanates) (pf: 728086), (), (erg: 128)	001	DF	EST 00075	P	D001
c.					
d.					

J. Additional Description for Materials Listed Above: 1A: DEVCON CLEANER ; 1x30-Gal. ** 11B: EPOXY RUBBER ; 1x30-Gal. *

K. Emergency Response Information:
CHEMTRAC
(800) 424-9300

if no alternate TSDF, return to generator 260#

15. Special Handling Instructions and Additional Information
Chicago Enpak Job# 53177-17. / ERG Guide 160 , 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 and Arkansas state 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: Joseph L. Bartholomew — Signature: Joseph L. Bartholomew — Month Day Year: 05 19 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy Linneman — Signature: Timothy Linneman — Month Day Year: 05 19 98

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Robert Helstern — Signature: Robert Helstern — Month Day Year: 05 21 98

FACILITY

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: Elaine Butler — Signature: Elaine Butler — Month Day Year: 06 06 98

EPA Form 8700-22 (Rev. 9-88) Previous edition is obsolete.

NOTICE: THE ORIGINAL AND NOT LESS THAN TWO (2) COPIES MUST MOVE WITH THE HAZARDOUS WASTE SHIPMENT. ONCE DELIVERED, THE TREATMENT/STORAGE/DISPOSAL FACILITY MUST RETURN THIS ORIGINAL COPY TO THE GENERATOR.

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 10-Jun-98

Receiving
Number: 980605-5860

Items Received and Recycled

Quantity	Description
144	Fluorescent 4' and Under
49	High Intensity Discharge (HID)
14	Fluorescent Greater than 4'
4	Ballasts - non PCB
4	Non-PCB Capacitors

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY P. D. Floyd

DATE June 10, 1998

Please print or type. (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.: IAD000222653
Manifest Document No.: 05825
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH P.O. BOX 220 FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone 515-244-7357
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 515-244-7357

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.
6. US EPA ID Number: IA0000109827

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

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313
10. US EPA ID Number: IA0000109827

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE, Solid, n.o.s., (Contains mercury), 9, NA3077, PG III (D009)	X	002	CF	00074	K	
b.	RQ, POLY chlorinated B. phenyls 9 UN2315 PG II (EPA waste code PCB-2X ERG-171)	X	001	DM	00025	K	
c.	Ballast Von PCB		001	DM	00041	K	
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171. D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

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: X Joseph L. Bartholomew
Signature: X Joseph L Bartholomew
Month Day Year: 06 05 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Richard A Douglas
Signature: Richard A Douglas
Month Day Year: 06 05 98

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

FACILITY

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: Larry Young
Signature: Larry Young
Month Day Year: 06 08 98

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. IAD000022653 | Manifest Document No. 058[illegible]

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2599 HIGHWAY 61 SOUTH P.O. BOX 220 FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number IA0000109827

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number IA0000109827

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	[illegible]	[illegible]	[illegible]	[illegible]	K	
b.	X	[illegible]	[illegible]		[illegible]	K	
c.		[illegible]	[illegible]	[illegible]	[illegible]	K	
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG[illegible] OR 9[illegible]NAERG-171. D.O.T. ERG[illegible] AND [illegible] ATTACHED. EMERGENCY [illegible] 800-351-[illegible]12

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 [illegible] | Signature [illegible] | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

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 | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK | PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

LAND DISPOSAL RESTRICTION FORM

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

GENERATOR NAME: CLIMAX MOLYBDENUM

MANIFEST NUMER: 05825

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	**Low Hg**	**NWW**	**YES NO**	**NLDBR**
	High Hg		**YES NO**	**"fb"**
			YES NO	**RMERC**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I X Joseph L. Bartholomew Certify

Print Name: X Joseph L. Bartholomew Date: 6-5-98

Printed on recycled paper

A-TEC RECYCLING INC.

BILL OF LADING

980605-5860

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

SHIPPING OR P.O. # FT2428

DATE: 6/5/98

PICKUP [X] DELIVERED [ ]

QUANTITY	LAMP TYPE
141	Fluorescent ≤ 4' and Compacts
12	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
19	High Intensity Discharge
Est:____Lbs.	Crushed Fluorescent Lamps (Act_____Lbs.)
	Other _____
207	◀ TOTAL UNITS RECEIVED

DRUM

DROP 4'(190)___ 4'(80)___ 8'___ Steel___
PICKUP 4'(190)1 cap 4'(80)___ 8'___ Steel___

NOTES:

RECEIVED: AP DATE:
PROCESSED: AP DATE:

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
		Ballasts (Fluorescent 4' & under)
	4	Ballasts (Fluorescent over 4')
4	4	Capacitors
		Other Items: _____
		_____
		_____
4	8	◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)

◀ TOTAL UNITS RECEIVED

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: [signature]
Date: 6-5-98 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 23-Sep-98

Receiving
Number: 980914-6636

Items Received and Recycled

Quantity	Description
112	Fluorescent 4' and Under
20	High Intensity Discharge (HID)
33	Fluorescent Greater than 4'
6	Ballasts - non PCB
1	Non-PCB Capacitors

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY

DATE September 23, 1998

Please print or type. (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. I A D 0 0 0 222653 | Manifest Document No. 06488 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220
FORT MADISON, IA

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE, SOLID, N.O.S. (Contains mercury), 9, NA3077, PG III (D009)	X	002	KT	00067	K	
b.	RQ, Polychlorinated biphenyls, 9, UN2315, PG II (EPA waste code PCB-2) (ERG 171)	X	001	DM	00037	K	
c.	Ballasts Non PCB		001	DM	00026	K	
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171, D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

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.

GENERATOR

Printed/Typed Name: X JOSEPH L. BARTHOLOMEW | Signature: X Joseph L. Bartholomew | Month Day Year: 01 | 13 | 18

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Richard D Douglas | Signature: Richard D Douglas | Month Day Year: 01 | 13 | 18

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space
Item 13b total Quantity 37 K is a field estimate, Actual measured weight is 32K #

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Larry Young | Signature: Larry Young | Month Day Year: 01 | 12 | 18

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

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PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. I A D 0 0 0 222653 | Manifest Document No. 06488 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220

4. Generator's Phone (319) 463-2222 FORT MADISON, IA

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.
6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7
C. State Transporter's ID
D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313
10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7
G. State Facility's ID
H. Facility's Phone 515-244-7357

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		X	02		7	K	
b.		X				K	
c.					32.4	K	
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR SENAERG-171 D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. EMERGENCY TELEPHONE NUMBER 800-351-4912.

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.

GENERATOR

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

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

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

LAND DISPOSAL RESTRICTION FORM

GENERATOR NAME: CLIMAX MOLYBDENUM

MANIFEST NUMER: 06488

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
D009	Low Hg	NWW	CIRCLE ONE YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Joseph L. Bartholomew Certify

Print Name: JOSEPH L. BARTHOLOMEW Date: 9-13-88

Printed on recycled paper

A-TEC RECYCLING INC.

BILL OF LADING

980914-6636

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

SHIPPING OR P.O. #	DATE:		PICKUP		DELIVERED
FT2428	9/14/98	X			

QUANTITY	LAMP TYPE
112	Fluorescent ≤ 4' and Compacts
33	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
20	High Intensity Discharge
Est:____Lbs.	Crushed Fluorescent Lamps (Act_____Lbs.)
	Other _____
165	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190)__/__4'(80)___	8'___	Steel___
PICKUP	4'(190)__/__4'(80)___	8'___	Steel___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
6	1	Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
5	2	Capacitors
		Other Items: _____
		_____
		_____
11	3	◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)

◀ TOTAL UNITS RECEIVED

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: _____
Date: 9-13-98 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: _____

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 11-Nov-98

Receiving
Number: 981105-7056

Items Received and Recycled

Quantity	Description
181	Fluorescent 4' and Under
5	High Intensity Discharge (HID)
30	Fluorescent Greater than 4'
13	Ballasts - non PCB
4	Batteries - Nickel Cadmium (Ni-Cad) (lbs)

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE November 11, 1998

Please print or type. (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. I A D 0 0 0 2 2 2 6 5 3 | Manifest Document No. 06802

2. Page 1 of 1

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

GENERATOR

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid, n.o.s., (contains mercury), 9, NA3077 PG111 (D009)	X	002	CF	00074	K	
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PG 11 (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00083	K	
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171, D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

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	Signature	Month	Day	Year
X Joseph L. Bartholomew	X Joseph L. Bartholomew	11	05	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Richard Young	Richard Young	11	05	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space
Item 13b Total Quantity 83K is a field estimate, Actual measured weight is 31K.LY

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Larry Young	Larry Young	11	09	98

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. I A D 0 0 0 2 2 2 5 5 2 | Manifest Document No. 06802

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE, Solid, n.o.s., (contains mercury), 9, NA3077 PG III (D009)	X	001	DF	00074	K	
b.	RQ, Polychlorinated Biphenyls, 9, UN2315, PG II (EPA Waste Code PCB-2) (NAERG-171)	X	001	DF	00093	K	
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR NAERG-171, D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. EMERGENCY TELEPHONE NUMBER 800-551-4912.

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.

GENERATOR

Printed/Typed Name

Signature

Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

FACILITY

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

Signature

Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

LAND DISPOSAL RESTRICTION FORM

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 06802

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	Low Hg	NWW	YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I X Joseph L. Bartholomew Certify

Print Name: X JOSEPH L. BARTholomew Date: 11-5-98

Printed on recycled paper

A-TEC RECYCLING INC.

BILL OF LADING

981105-7056

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH P. O. BOX 220 FORT MADISON, IA 52627	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH P. O. BOX 220 FORT MADISON, IA 52627

SHIPPING OR P.O. # FT2428 DATE: 11/5/98 PICKUP DELIVERED

QUANTITY	LAMP TYPE
181	Fluorescent ≤ 4' and Compacts
30	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
5	High Intensity Discharge
Est:_____ Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____
216	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190) 1	4'(80)___	8'___	Steel 1
PICKUP	4'(190) 1	4'(80)___	8'___	Steel 1
LOOSE	4'(190)___	4'(80)___	8' 1	Steel___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
8		Ballasts (Fluorescent 4' & under)
8		Ballasts (Fluorescent over 4')
4		Capacitors
		Other Items: _____
		_____
		_____
20		◀ TOTAL UNITS RECEIVED

DRUM

DRUM #:	
DRUM #:	
DRUM #:	

Ni-Cad → 10# est
3 [illegible]

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: X Joseph [illegible]
Date: 11-5-98 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [illegible]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

STATE OF ILLINOIS

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 | Manifest Document No. 20517 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address / Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. Illinois Manifest Document Number: IL 8309653 MANIFEST FEE PAID

B. Illinois Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC | 6. US EPA ID Number: ILD 984908202

C. Illinois Transporter's ID: UPW01512880H

D. 319) 386-3024 Transporter's Phone

7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. | 8. US EPA ID Number: SCD987574647

E. Illinois Transporter's ID: [illegible]

F. (708) 849-4850 Transporter's Phone

9. Designated Facility Name and Site Address 000654
SAFETY-KLEEN SYSTEMS, INC
633 E 138TH ST
DOLTON, IL 60419

10. US EPA ID Number: ILD 980613913

G. Illinois Facility's ID: 0310690006 (K)

H. Facility's Phone: 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D006, D039) (ERG#171) AQUEOUS PARTS CLEANER	001	DM	00006	G	EPA HW Number: X X D006; Authorization Number:
b.					EPA HW Number: X X; Authorization Number:
c.					EPA HW Number: X X; Authorization Number:
d.					EPA HW Number: X X; Authorization Number:

Additional Descriptions for Materials Listed Above: I(A) D039

K. Handling Codes for Wastes Listed Above in Item #14: M094

15. Special Handling Instructions and Additional Information
9844 96144696 P20517 5-047-01-5062 06
SKCORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIER, AS NECESSARY.
EMERGENCY RESP#800-468-1760 24HR PP#P20517 A: 10087 B: C: D:

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, and Illinois 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.

GENERATOR — Printed/Typed Name: Dave Woodley | Signature: Dave Woodley | DATE Month Day Year: 11 12 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Kevin Ice | Signature: [illegible] | DATE Month Day Year: 11 12 98

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: Thomas Brown | Signature: [illegible] | DATE Month Day Year: 11 16 98

FACILITY

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: M. Shellman | Signature: M. Shellman | DATE Month Day Year: 11 16 98

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

STATE OF ILLINOIS

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 | Manifest Document No. 20517
2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address / Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319)463-7151

A. Illinois Manifest Document Number: IL 8309653 MANIFEST FEE PAID
B. Illinois Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. Illinois Transporter's ID: UPW0151288DH
D. 319) 386-3024 Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
E. Illinois Transporter's ID
F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address 000654
SAFETY-KLEEN SYSTEMS, INC
630 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913
G. Illinois Facility's ID: 0310690006
H. Facility's Phone: 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D006, D039) (ERG#171) AQUEOUS PARTS CLEANER	001	DM	055	G	EPA HW Number X D006; Authorization Number
b.					EPA HW Number X; Authorization Number
c.					EPA HW Number X; Authorization Number
d.					EPA HW Number X; Authorization Number

J. Additional Descriptions for Materials Listed Above
1(A) D039

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
2844 96144696 P20317 5-047-01-5062 C6
SKCORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIER, AS NECESSARY.
EMERGENCY RESP#800-468-1760 24HR
A: 10087 B: C: D:

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, and Illinois 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	Signature	DATE Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	DATE Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	DATE Month Day Year

FACILITY

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	Signature	DATE Month Day Year

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 6. GENERATOR COPY

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

K54214-R5732 SAFETY-KLEEN 11/09/98 . PAGE: 1
LOCATION: 504701 LAND DISPOSAL RESTRICTION NOTICE 06:26:48

TO: SAFETY-KLEEN SYSTEMS, INC. EPA ID NO. ILD980613913
633 E 138TH ST (DESIGNATED FACILITY)
DOLTON, IL 60419

UNDER MANIFEST/SALES SERVICE NUMBER (I2843 2735) THE GENERATOR NOTED BELOW IS SHIPPING TO YOU WASTE DETERMINED TO BE RESTRICTED UNDER 40 CFR PART 268. IN ACCORDANCE WITH 40 CFR PART 268.7, THE GENERATOR HEREBY PROVIDES NOTICE THAT THE WASTE IS RESTRICTED FROM LAND DISPOSAL. A COPY OF THIS FORM MUST BE KEPT BY THE GENERATOR FOR FIVE (5) YEARS FROM THE DATE OF WASTE SHIPMENT.

WASTE NAME: 633 AQUEOUS SOLUTION, PARTS WASHER D006 SKDOT#: 0010087
WASTE CODE(S): D006 D039
TREATABILITY GROUP: NONWASTEWATERS

EPA WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY OR REGULATED HAZARDOUS CONSTITUENT	TREATMENT STANDARD (*) CONCENTRATION OR TECHNOLOGY CODE
D006	CADMIUM (CD)	1.0 MG/L TCLP
D006	CADMIUM (CD)	0.11 MG/L ******
D006	CADMIUM CONTAINING BATTERIES SUBCATEGORY	RTHRM ******
D039	TETRACHLOROETHYLENE	6.0 MG/KG ****

Spec Gravity = .99

N O T E S
THE CONSTITUENT COMPOSITION IS BASED ON KNOWLEDGE OF THE WASTE [illegible] SAFETY DATA SHEETS FOR THE [illegible] USED AND THE PROCESS [illegible] THE WASTE.
NOTES * THESE TREATMENT STANDARDS DO NOT PRECLUDE [illegible] FINAL DISPOSITION.
** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE [illegible]
*** TREATMENT STANDARD IS APPLICABLE IN CERTAIN [illegible] STATES AND MEET [illegible] TREATMENT STANDARDS
**** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE [illegible]
*****NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE [illegible]
UHC NOTICE [illegible] GENERATOR IS NOT REQUIRED TO LIST UNDERLYING [illegible] WHEN TREATMENT [illegible] FOR ALL REGULATED CONSTITUENTS [illegible] TO DISPOSAL
NOTICE [illegible]

GENERATOR NAME [illegible] EPA ID [illegible]
EQ#: [illegible] 3-047-01-5062 TERR: 06 REF# [illegible]
DR COPY - GENERATOR MIDDLE COPY - FACILITY BOTTOM COPY - TRANSFER

SAFETY-KLEEN CORP.
STATE PRESCRIBED FORM
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610
EPA Form 8700-22 (6-89)

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 20517
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

GENERATOR

3. Generator's Name and Mailing Address / Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

A. Illinois Manifest Document Number: IL 8432735 MANIFEST FEE PAID

B. Generator's IL ID Number: 9190019999

4. Generator's Phone (319) 463-7151

C. Illinois Transporter's ID: UPW01512880H

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202

D. (319) 386-3024 Transporter's Phone

7. Transporter 2 Company Name: Safety Kleen (TG) Inc
8. US EPA ID Number: IXD987546147

E. Illinois Transporter's ID: UPW0203954OH

9. Designated Facility Name and Site Address 000654
SAFETY-KLEEN SYSTEMS, INC
633 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913

F. (708) 849-9477 Transporter's Phone

G. Facility's IL ID Number: 0310690006

H. Facility's Phone: 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D006, D039) (ERG#171) AQUEOUS PARTS CLEANER	001	DM	00012	G	EPA HW Number D006
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above
1 (A) D039

K. Handling Codes for Wastes Listed Above in Item #14
M124

15. Special Handling Instructions and Additional Information
9848 96284925 P20517 5-047-01-5062 06
SKCORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIER, AS NECESSARY.
EMERGENCY RESP#800-468-1760 24HR PP# P20517 A: 10087 B: C: D:

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, and Illinois 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	Signature	Month	Day	Year
Dave Woodley	Dave Woodley	12	16	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Kevin Kitt		12	16	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
FRANK OLITKIEWICZ		12	21	98

FACILITY

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	Signature	Month	Day	Year
Dana S. Fisher	Dana S. Fisher	12	22	98

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

K54214-R5732

SAFETY-KLEEN

LOCATION: 504701 LAND DISPOSAL RESTRICTION NOTICE 10/12/98 16:57:46 PAGE: 1

TO: SAFETY-KLEEN SYSTEMS, INC.
633 E 138TH ST
DOLTON, IL 60419

IL8309653

EPA ID NO. ILD980613913
(DESIGNATED FACILITY)

UNDER MANIFEST/SALES SERVICE NUMBER (P20519) THE GENERATOR NOTED BELOW IS SHIPPING TO YOU WASTE DETERMINED TO BE RESTRICTED UNDER 40 CFR PART 268. IN ACCORDANCE WITH 40 CFR PART 268.7, THE GENERATOR HEREBY PROVIDES NOTICE THAT THE WASTE IS RESTRICTED FROM LAND DISPOSAL. A COPY OF THIS FORM MUST BE KEPT BY THE GENERATOR FOR FIVE (5) YEARS FROM THE DATE OF WASTE SHIPMENT.

WASTE NAME: 633 AQUEOUS SOLUTION, PARTS WASHER D006 SKDOT#: 0010087
WASTE CODE(S): D006 D039
TREATABILITY GROUP: NONWASTEWATERS

EPA WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY OR REGULATED HAZARDOUS CONSTITUENT	TREATMENT STANDARD (*) CONCENTRATION OR TECHNOLOGY CODE
D006	CADMIUM (CD)	1.0 MG/L TCLP
D006	CADMIUM (CD)	0.11 MG/L ******
D006	CADMIUM CONTAINING BATTERIES SUBCATEGORY	RTHRM ******
D039	TETRACHLOROETHYLENE	6.0 MG/KG ****

spec Grnty

= .990

N O T E S

THE CONSTITUENT COMPOSITION IS BASED ON KNOWLEDGE OF THE WASTE (VIA MATERIAL SAFETY DATA SHEETS FOR THE CHEMICAL(S) USED, AND THE PROCESS WHICH CREATED THE WASTE).

NOTES: * THESE TREATMENT STANDARDS DO NOT PRECLUDE RECLAMATION PRIOR TO FINAL DISPOSITION.
** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 12-19-94.
*** TREATMENT STANDARDS APPLICABLE IN CERTAIN HSWA-AUTHORIZED STATES AND MEET UNIVERSAL TREATMENT STANDARDS.
**** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 7-8-96.
******NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 8-24-98.

UHC NOTICE: GENERATOR IS NOT REQUIRED TO LIST UNDERLYING CONSTITUENTS WHEN TREATER MONITORS FOR ALL REGULATED CONSTITUENTS PRIOR TO DISPOSAL.

LDR NOTICE: THIS LDRN EXPIRES ON 12/31/98.

GENERATOR NAME: CLIMAX MOLYBDENUM CO EPA ID: IAD000222653

SEQ#: 974 LOC: 504701 CUST: 5-047-01-5062 TERR: 06 REF#: 20517 SW: 9844

TOP COPY: GENERATOR MIDDLE COPY: FACILITY BOTTOM COPY: TRANSFER

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 17-Mar-99

Receiving
Number: 990309-7880

Items Received and Recycled

Quantity	Description
142	Fluorescent 4' and Under
19	High Intensity Discharge (HID)
63	Fluorescent Greater than 4'
7	Ballasts - non PCB
7	Non-PCB Capacitors
2.2	Batteries - Nickel Cadmium (Ni-Cad) (lbs)

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY

DATE March 17, 1999

Please print or type. (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. I A D 0 0 2 2 2 6 5 3 — Manifest Document No. 107485

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FORT MADISON IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid, n.o.s., (contains mercury), 9, NA3077 PG111 (D009)	X	002	CF	00086	K	
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PG 11 (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00029	K	
c. Non PCB Ballasts & Capacitors		001	DM	00031	K	
d.						

Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31, OR 96NAERG-171, D.O.T. ERG-31 AND LAND BAN NOTIFICATION ARE ATTACHED. **EMERGENCY TELEPHONE NUMBER 800-551-4912.**

MAR 1 8

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.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
X JOSEPH L. BARTHOLOMEW	X Joseph L. Bartholomew	03	11	1999

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Richard Young	Richard Young	03	11	1999

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Larry Young	Larry Young	03	11	1999

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.: IAD000222653
Manifest Document No.: 07485
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FORT MADISON IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone 515-244-7357
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 515-244-7357

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.
6. US EPA ID Number: IA0000109327
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IOWA 50313
10. US EPA ID Number: IA0000109827

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid, n.o.s., (contains mercury), 9, NA3077 PG111 (D009)	X	[illegible]	CF	00086	K	
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PG 11 (EPA Waste Code PCB-2) (NAERG-171)	X	[illegible]	[illegible]	00029	[illegible]	
c. [illegible]		[illegible]	[illegible]	00031	K	
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO D.O.T. ERG-31 OR GENAERG-171. D.O.T. ERG-31 AND LAND CAN NOTIFICATION ARE ATTACHED. EMERGENCY TELEPHONE NUMBER 800-551-4912.

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.
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Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year: [illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year: [illegible]

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

FACILITY

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
Signature
Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK
PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

LAND DISPOSAL RESTRICTION FORM

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 07485

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	Low Hg	NWW	YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I X Joseph L. Bartholomew Certify

Print Name: X JOSEPH L. BARTHOLOMEW Date: 3-11-99

Printed on recycled paper

A-TEC RECYCLING INC.

BILL OF LADING

990309-7880

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P O BOX 220
FORT MADISON IA 52627

SHIPPING OR P.O. # 12426

DATE: 3/9/99

PICKUP [X] DELIVERED [ ]

QUANTITY	LAMP TYPE
142	Fluorescent ≤ 4' and Compacts
63	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
19	High Intensity Discharge
Est:____ Lbs	Crushed Fluorescent Lamps(Act____Lbs.)
	Other ____
224	◀ TOTAL UNITS RECEIVED

DRUM

DROP 4'(190)___ 4'(80)___ 8'___ Steel___

PICKUP 4'(190)___ 4'(80)___ 8'___ Steel___

NOTES:

RECEIVED: A P DATE:

PROCESSED: A P DATE:

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
3		Ballasts (Fluorescent 4' & under)
	7	Ballasts (Fluorescent over 4')
2	6	Capacitors
		Other Items: ____
		____
		____
5	13	◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
	◀ TOTAL UNITS RECEIVED		

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: X Joseph T. Kurtheim

Date: 3/10/99 EPA #: IA0000109827

A-TEC Recycling, Inc. Accepted By: ____

STATE OF ILLINOIS

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

5-047-01 STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 Manifest Document No. 11131

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: CLIMAX MOLYBDENUM CO, 598 HWY 61 SOUTH, FORT MADISON IA 52627

Location if Different:

4. Generator's Phone (319) 463-7151

A. Illinois Manifest Document Number: IL 8873978 MANIFEST FEE PAID

B. Generator's IL ID Number: 9190019999

C. Illinois Transporter's ID: UPW0151881C UPW203954OH

D. (319) 386-3024 Transporter's Phone

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC

6. US EPA ID Number: ILD 984908202

E. Illinois Transporter's ID: UPW0395740H

7. Transporter 2 Company Name: SAFETY-KLEEN (TG) INC, 000654

8. US EPA ID Number: SCD987574647

F. (708) 849-9415 Transporter's Phone

9. Designated Facility Name and Site Address: SAFETY-KLEEN SYSTEMS, INC, 633 E 138TH ST, DOLTON, IL 60419

10. US EPA ID Number: ILD 980613913

G. Facility's IL ID Number: 0310690006

H. Facility's Phone 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE ACETONE 3 UN1090 PG II (F003)(ERG#127)	001	DM	00055	G	EPA HW Number F003
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above: D001

K. Handling Codes for Wastes Listed Above in Item #14: M061

15. Special Handling Instructions and Additional Information: MFST R/T# 96989089 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PR# P11131 SKDOT# A: 533 B: C: D:

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, and Illinois regulations.

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GENERATOR — Printed/Typed Name: Shelly R Heston — Signature: Shelly R Heston — Month 04 Day 01 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Kevin Cite — Signature — Month 04 Day 01 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: Dave Carlile — Signature — Month 4 Day 8 Year 99

FACILITY

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: ESTHER MIKULA — Signature: Esther Mikula — Month 04 Day 08 Year 99

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center

A)1616195/1051848 COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

STATE OF ILLINOIS — ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

SAFETY-KLEEN CORP.
STATE PRESCRIBED FORM

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH

EPA Form 8700-22 (6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address | Location if Different:

A. Illinois Manifest Document Number: IL 8873978 — MANIFEST FEE PAID

B. Generator's IL ID Number

4. Generator's Phone ( )

C. Illinois Transporter's ID

5. Transporter 1 Company Name | 6. US EPA ID Number

D. ( ) Transporter's Phone

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

E. Illinois Transporter's ID

9. Designated Facility Name and Site Address | 10. US EPA ID Number

F. ( ) Transporter's Phone

G. Facility's IL ID Number

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information

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, and Illinois regulations.

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Printed/Typed Name | *Signature* | DATE *Month Day Year*

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | *Signature* | DATE *Month Day Year*

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | *Signature* | DATE *Month Day Year*

TRANSPORTER

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 | Signature | DATE *Month Day Year*

FACILITY

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center

COPY 6. GENERATOR COPY

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

81363-R4747

SAFETY-KLEEN CORP.
NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

: SAFETY-KLEEN CORP.
633 E 138TH ST
DOLTON, IL 60419

EPA ID: ILD980613913

UNDER MANIFEST NUMBER JL8873978 / 11131 LINE NUMBER 11A
THE GENERATOR NOTED BELOW IS SHIPPING TO YOU A RESTRICTED WASTE UNDER FEDERAL AND STATE LAND DISPOSAL RESTRICTION REGULATIONS. IN ACCORDANCE WITH THESE REGULATIONS, THE GENERATOR HEREBY PROVIDES NOTICE THAT THE WASTE IS RESTRICTED AND THE EPA WASTE CODES AND APPROPRIATE TREATMENT STANDARDS ARE AS FOLLOWS:

HAZARDOUS WASTE CODES: F003 D001

TREATABILITY GROUP: NONWASTEWATERS

CALIFORNIA LIST PROHIBITED WASTES ***	PROHIBITED LEVEL AND TREATMENT STANDARD
HALOGENATED ORGANIC COMPOUNDS	1000 MG/L INCIN*
F001, F002, F003, F004 AND/OR F005 SPENT SOLVENT WASTES REGULATED HAZARDOUS CONSTITUENTS	TREATMENT STANDARD CONCENTRATION (TOTAL MG/L FOR WW, TOTAL MG/KG FOR NWW UNLESS NOTED AS "TCLP")
ACETONE	160
N-BUTYL ALCOHOL	2.6
1,1,1-TRICHLOROETHANE **	6.0
1,1,1-TRICHLOROETHANE ***	5.6

EPA WASTE CODE	WASTE DESCRIPTION AND TREATMENT/REGULATORY SUBCATEGORY OR REGULATED HAZARDOUS CONSTITUENT	TREATMENT STANDARD CONCENTRATION OR TECHNOLOGY CODE
D001	HIGH TOC IGNITABLE CHARACTERISTIC WASTE.	RORGS; OR CMBST **

NOTES: * THESE TREATMENT STANDARDS DO NOT PRECLUDE SOLVENT RECOVERY OR USE AS FUEL PRIOR TO LAND DISPOSAL.
** NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 12-19-94.
*** TREATMENT STANDARDS APPLICABLE IN CERTAIN HWSA-AUTHORIZED STATES.
****AND MEET UNIVERSAL TREATMENT STANDARDS
*****NEW TREATMENT STANDARDS UNDER FEDERAL RULES EFFECTIVE 7-8-96.

ENERATOR NAME: CLIMAX MOLYBDENUM CO EPA ID: IAD000222653

ENERATOR SIGNATURE (OPTIONAL): _____

me & TITLE (OPTIONAL): _____

AFETY-KLEEN SAMPLE NUMBER: 1051846 CONTROL NUMBER: 1616195-1

LAB WASTE

81363-R4747 (REPRINT) PREQUALIFICATION EVALUATION PAGE 1 OF 5
PARTS WASHER SERVICE COMPLETED: 08/13/96
FLUID RECOVERY SERVICES REVISED: 08/14/96
RUN: 08/18/97

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1616195-1
DAVENPORT LAB #: 6069616195-2
SURVEY #: 1051848

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-5062

CLIMAX MOLYBDENUM CO
2598 HWY 61 S
P O BOX 220
FORT MADISON, IA 52627

ATTN: THOMAS ANDERSON

BRANCH: 504701 - DAVENPORT

GENERAL DESCRIPTION: WASTE LAB MATERIAL (SOLVENT)
NATURE OF BUSINESS: CHEMICAL MFG S.I.C.: STATUS: SQG
FEDERAL EPA ID: IAD000222653 STATE ID(S): IL 9190019999
FACILITY ADDRESS: MANIFEST BILLING ADDRESS:
2598 HWY 61 S
P O BOX 220
FORT MADISON, IA 52627
PROCESS DESCRIPTION: LAB
GENERATION AMOUNT: 55 GALLONS YEARLY PART#: 87106
P.O. #: DATE SURVEY SIGNED: 07/31/96
CONTACT: THOMAS ANDERSON TITLE: ENVIRONMENTAL MANAGE PHN: 319-463-7151

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

COMPLETED: 08/13/96
REVISED: 08/14/96
RUN: 08/18/97

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1616195-1
LAB #: 6069616195-2
SURVEY #: 1051848

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP PART NUMBER: 0087100 WASTE,SPEC FUEL 55-1
REVIEW DATE: 08/12/1996 REVIEWERS: CAP KAW

APPROVED FACILITIES:

	SAFETY-KLEEN CORP. 1722 COOPER CREEK ROAD DENTON, TX 76208	SAFETY-KLEEN CORP. 633 E 138TH ST DOLTON, IL 60419
FED EPA#:	TXD077603371	ILD980613913
STATE EPA#:	65124	0310690006
TELEPHONE:	9403832611	7088494850
STATE AUTH:		000161

	SAFETY-KLEEN CORP. 3700 LAGRANGE ROAD SMITHFIELD, KY 40068
FED EPA#:	KYD053348108
STATE EPA#:	
TELEPHONE:	5028452453
STATE AUTH:	

APPROVED DOT - SHIPPING DESCRIPTION
0000533 DRUM WASTE ACETONE
3 UN1090 PG II
(F003)(ERG#127)

STATE/PROV. CODES: TX OUTS203H
US EPA WASTE CODES: F003 D001
USA

REVIEW COMMENTS:
****
*
* FOR FUEL. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE
* EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM
* THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.
*
* RECD MOD FORM 8/14/96,NOT A R&D LAB, SEE C#206756-3 FOR SIMILAR MATERIAL.
****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

OZONE DEPLETING SUBSTANCE (ODS) WARNING

WARNING: CONTAINS
_X_ 1,1,1-TRICHLOROETHANE(METHYLCHLOROFORM), ____ CARBON TETRACHLORIDE
____ CHLOROTRIFLUOROMETHANE(CFC-13), ____ DICHLORODIFLUOROMETHANE(CFC-12)
____ DICHLOROTETRAFLUORETHANE(CFC-114), ____ TETRACHLORODIFLUOROETHANE(CFC-112)
____ TRICHLOROFLUOROMETHANE(CFC-11), ____ TRICHLOROTRIFLUOROETHANE(CFC-113)
____ OTHER (NAME MUST BE TYPED) ____
A SUBSTANCE WHICH HARMS PUBLIC HEALTH AND ENVIRONMENT BY DESTROYING OZONE IN THE UPPER ATMOSPHERE.
CHECK ALL THE ABOVE THAT APPLY.
*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1616195-1
LAB #: 6069616195-2
SURVEY #: 1051848

AFFIX THE LABEL WITH SAFETY-KLEEN PARTS NUMBER 81470 ON EACH DRUM CONTAINING THIS WASTE STREAM.

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES
COMPLETED: 08/13/96
REVISED: 08/14/96
RUN: 08/18/97

[redacted] ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1616195-1
LAB #: 6069616195-2
SURVEY #: 1051848

GENERAL ANALYSIS OF TOTAL SAMPLE

COLOR	:	GREEN,BROWN
WATER CONTENT	:	22.0 WT%
NON-VOLATILE RESIDUE	:	1.4 WT% DESCRIPTION: SOLID
FLAMMABILITY	:	FLASHED AT 73 F BY SETAFLASH
FLAMMABILITY	:	FLASHED AT 140 F BY SETAFLASH
PH	:	DIRECT BY METER 2.7
NEUTRALIZATION	:	0.44 WT% OR 4.4 G/KG ACID
RADIOACTIVITY	:	NONE DETECTED
COMMENTS: H20 COMP: COMP;		

FUEL EVALUATION OF TOTAL SAMPLE

HEAT CONTENT	:	8030 BTU/LB	ASH UPON COMBUSTION	: <	1.0 WT%
TOTAL BROMINE	BR: <	0.1 WT%	TOTAL FLUORINE	F : <	0.1 WT%
TOTAL SULFUR	S : <	0.1 WT%	TOTAL CHLORINE	CL:	0.3 WT%

GENERAL COMPOSITION:	COMPOSITION BY:	APPEARANCE (VOL%)	TOTAL (WT%)
AQUEOUS PHASE	(FREE WATER)	100.0	100.0
ORGANIC PHASE	(FEEDSTOCK)	0.0	0.0
BOTTOM SLUDGE	(SEMISOLIDS)	0.0	0.0
BOTTOM SOLID	(SETTLED SOLIDS)	0.0	0.0
TOTAL		100.0	100.0

TOTAL PHASE SPECIFIC GRAVITY: .850 VISCOSITY (CENTIPOISE): < 50 CPS

SPECIFIC COMPOSITION OF TOTAL SAMPLE	COMPOSITION OF:	TOTAL SAMPLE (WT%)	TOTAL SAMPLE (WT%)
WATER CONTENT		22.0	22.0
NON-VOLATILE RESIDUE	DESCRIPTION: SOLID	1.4	1.4
VOLATILE ORGANICS BY DIFFERENCE		76.6	76.6
TOTAL		100.0	100.0

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

COMPLETED: 08/13/96
REVISED: 08/14/96
RUN: 08/13/97

ACCEPT FOR SHIPMENT

CONTROL #: 1616195-1
LAB #: 60696161 95-2
SURVEY #: 1051848

BRANCH/SUBMITTER: 504701
DAVENPORT

VOLATILE ORGANIC COMPOSITION OF TOTAL SAMPLE BY GAS CHROMATOGRAPHY
SAMPLE PREPARATION METHODS: METHANOL-EXTRACT, OTHER
DETECTION METHODS : FID, FID

COMPOUND NAME	COMPOSITION OF: VOLATILE ORGANICS (WT%)	TOTAL SAMPLE (WT%)
ACETONE	86.9	66.6
CODE: ACE CAS NUMBER: 67-64-1		
TRICHLOROETHANE, 1,1,1- (CLASS I ODS)	7.7	5.9
CODE: 111 CAS NUMBER: 71-55-6		
ETHYL ALCOHOL	2.6	2.0
CODE: ETOH CAS NUMBER: 64-17-5		
BUTYL ALCOHOL, N-	1.5	1.1
CODE: NBA CAS NUMBER: 71-36-3		
TOTAL OTHERS (<1.0% EACH)	1.3	1.0
CODE: TO CAS NUMBER:		
TOTAL	100.0	76.6

SPECIFIC ORGANIC COMPOSITION
POLYCHLORINATED BIPHENYLS (PCBS): NONE DETECTED (

LABORATORY REVIEW: A SEG CODE: REVIEWERS: XXX XXX LAB: SK TECHNICAL CTR
RELEASED: 08/13/96 ANALYZED: 08/12/96 SUBMITTED: 08/05/96

THE ANALYSIS CONTAINED HEREIN ARE PERFORMED SOLELY FOR THE PURPOSE OF QUALIFYING THE ANALYZED MATERIALS FOR ACCEPTANCE BY SAFETY-KLEEN CORP. IN ACCORDANCE WITH ITS PERMITS AND PROCESSING CAPABILITIES.

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE IS REQUIRED.

*** ACCEPT FOR SHIPMENT

END OF DOCUMENT

SAFETY-KLEEN CORP. STATE PRESCRIBED FORM 5-047-01 P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761 State Form LPC 62 8/81 IL532-0610 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH — EPA Form 8700-22 (6-89) — Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653 — Manifest Document No.: 91480
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: CLIMAX MOLYBDENUM CO, 2598 HWY 61 SOUTH, FORT MADISON IA 52627 — Location if Different:

4. Generator's Phone (319) 463-7151

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC — 6. US EPA ID Number: ILD 984908202

7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. — 8. US EPA ID Number: SCD 987574647

9. Designated Facility Name and Site Address: 000654 SAFETY-KLEEN SYSTEMS, INC, 633 E 138TH ST, DOLTON, IL 60419 — 10. US EPA ID Number: ILD 980613913

A. Illinois Manifest Document Number: IL 8873700 — MANIFEST FEE PAID

B. Generator's IL ID Number: 9190019999

C. Illinois Transporter's ID: UPW151288IL — D. (319) 386-3024 Transporter's Phone

E. Illinois Transporter's ID: UPW2039540H — F. (864) 576-1085 Transporter's Phone

G. Facility's IL ID Number: 0310690006

H. Facility's Phone: 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ HAZARDOUS WASTE, LIQUID, N.O.S. (LEAD) 9 NA3082 PG III (D008)(ERG#171)	001	DM	00055	G	EPA HW Number D008
b.					EPA HW Number
c. 666112 NDC					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14: M124

15. Special Handling Instructions and Additional Information: MFST R/T# 97265615 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PP#91480 SKDOT# A: 1160 B: C: D:

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, and Illinois 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.

GENERATOR — Printed/Typed Name: Joseph L. Bartholomew — Signature: Joseph L. Bartholomew — DATE: Month 05 Day 27 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Kevin Kite — Signature: [signature] — DATE: Month 05 Day 27 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: Dave Carlile — Signature: [signature] — DATE: Month 6 Day 3 Year 99

FACILITY

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: [illegible] — Signature: [signature] — DATE: Month 06 Day 04 Year 99

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

A)1910758/2076339

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

81363-R4845
OIL RECOVERY SERVICE
OIL SERVICES COLLECTION

PREQUALIFICATION EVALUATION

COMPLETED: 04/05/99
REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1910758-3
LAB #: 9910758-1
SURVEY #: 2076339

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-5062

CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON, IA 52627

ATTN: SHELLY HESTON

BRANCH: 504701 - DAVENPORT

GENERAL DESCRIPTION: ANTIFREEZE AND OIL
NATURE OF BUSINESS: PLASTICS S.I.C.: STATUS:
FEDERAL EPA ID: IAD000222653 STATE ID(S):

FACILITY ADDRESS:
2598 HWY 61 SOUTH
FORT MADISON, IA 52627

BILLING ADDRESS:
PO BOX 172288
DENVER, CO 80217

PROCESS DESCRIPTION: VEHICLE MAINT.
GENERATION AMOUNT: 55 GALLONS YEARLY PART#:
P.O. #: DATE SURVEY SIGNED: 03/24/99
CONTACT: SHELLY HESTON TITLE: SUPERVISOR PHN: 319-463-2224

** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

81363-R1845
OIL RECOVERY SERVICE
OIL SERVICES COLLECTION

ACCEPT FOR SHIPMENT

PREQUALIFICATION EVALUATION

COMPLETED: 04/05/99
REVISED:
RUN: 04/06/99

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1910758-3
LAB #: 9910758-1
SURVEY #: 2076339

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP
REVIEW DATE: 03/30/1999
PART NUMBER: 0087100 WASTE,SPEC FUEL 55-1
REVIEWERS: RBU KAW

APPROVED FACILITIES:

SAFETY-KLEEN SYSTEMS, INC.
1722 COOPER CREEK ROAD
DENTON, TX 76208
FED EPA#: TXD077603371
STATE EPA#: 65124
TELEPHONE: 9404835200
STATE AUTH:

SAFETY-KLEEN SYSTEMS, INC.
633 E 138TH ST
DOLTON, IL 60419
IL0980613913
0310690006
7088494850

APPROVED DOT - SHIPPING DESCRIPTION
0001160 DRUM OR BULK
RQ HAZARDOUS WASTE, LIQUID, N.O.S.
(LEAD)
9 NA3082 PG III (D008)(ERG#171)

STATE/PROV. CODES: TX OUTS205H
US EPA WASTE CODES: D008
USA

REVIEW COMMENTS:

****

* THIS WASTE MUST BE SHIPPED IN "X, Y OR Z" DOT RATED CONTAINERS.

* OK FOR FUEL. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.

****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

81363-R4845 PREQUALIFICATION EVALUATION PAGE 3 OF 4
OIL RECOVERY SERVICE COMPLETED: 04/05/99
OIL SERVICES COLLECTION REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1910758-3
DAVENPORT LAB #: 9910758-1
SURVEY #: 2076339

GENERAL ANALYSIS OF TOTAL SAMPLE

COLOR	:	BROWN GREEN
WATER CONTENT	:	50.0 WT%
NON-VOLATILE RESIDUE	:	20.0 WT%
FLAMMABILITY	:	NO FLASH AT 140 F BY SETAFLASH
FLAMMABILITY	:	NO FLASH AT 200 F BY SETAFLASH
PH	:	DIRECT BY METER 7.5
RADIOACTIVITY	:	NONE DETECTED

COMMENTS: FLAMMABILITY AT 200 F: NO FLASH NON-VOLATILE RESIDUE

FUEL EVALUATION OF TOTAL SAMPLE

HEAT CONTENT	:	9020 BTU/LB	ASH UPON COMBUSTION	:	< 1.0 WT%
TOTAL BROMINE	BR:	< 0.1 WT%	TOTAL CHLORINE	CL:	< 0.1 WT%
TOTAL FLUORINE	FF:	< 0.1 WT%	TOTAL SULFUR	FS:	0.3 WT%

COMMENTS: CL: <0.021 WT.%

METALS CONTENT OF TOTAL SAMPLE (PPM):

SILVER	(D011)	AG:	< 2.3	ARSENIC	(D004)	AS:	< 23
BARIUM	(D005)	BA:	< 92	BERYLLIUM		BE:	< 4.6
CADMIUM	(D006)	CD:	< 6.9	COBALT		CO:	< 6.9
CHROMIUM	(D007)	CR:	< 4.6	COPPER		CU:	9.5
IRON		FE:	59	MERCURY	(D009)	HG:	< 23
MAGNESIUM		MG:	< 12	MANGANESE		MN:	< 4.6
NICKEL		NI:	< 9.2	PHOSPHORUS		P :	460
LEAD	(D008)	PB:	33	ANTIMONY		SB:	< 34
SELENIUM	(D010)	SE:	< 46	SILICON		SI:	< 92
TITANIUM		TI:	< 4.6	THALLIUM		TL:	< 69
VANADIUM		V :	< 4.6	ZINC		ZN:	< 23

GENERAL COMPOSITION: COMPOSITION BY:

	APPEARANCE (VOL%)	TOTAL (WT%)
AQUEOUS PHASE (FREE WATER)	0.0	0.0
ORGANIC PHASE (FEEDSTOCK)	99.0	100.0
BOTTOM SLUDGE (SEMISOLIDS)	0.0	0.0
BOTTOM SOLID (SETTLED SOLIDS)	0.0	0.0
TOTAL	100.0	100.0

TOTAL PHASE SPECIFIC GRAVITY: VISCOSITY (CENTIPOISE): < 50 CPS

SPECIFIC COMPOSITION OF TOTAL SAMPLE COMPOSITION OF:

	TOTAL SAMPLE (WT%)	TOTAL SAMPLE (WT%)
WATER CONTENT	50.0	50.0
NON-VOLATILE RESIDUE	20.0	20.0
VOLATILE ORGANICS BY DIFFERENCE	30.0	30.0
TOTAL	100.0	100.0

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 30-Jun-99

Receiving
Number: 990621-8595

Items Received and Recycled

Quantity	Description
99	Fluorescent 4' and Under
63	High Intensity Discharge (HID)
42.3	Crushed Fluorescent Lamps (lbs)
16	Fluorescent Greater than 4'
34	Ballasts - non PCB
1.1	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
0.2	Batteries - Alkaline (lbs)

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY P. S. Floyd

DATE June 30, 1999

Please print or type. (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. I A D 0 0 0 2 2 2 6 5 3 — Manifest Document No. 08033 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. ~~Waste No.~~ Unit Weight
a. HAZARDOUS WASTE, Solid , n.o.s., (contains mercury), 9, NA3077, PGIII (D009)	X	003	CF	00110	K	K
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII CEPA waste code PCB-2 (NAERG-171)	X	001	DM	00037	K	
c. Ballasts Non PCB		001	DM	00126	K	
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
x Shelly Heston	x Shelly Heston	10	21	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Richard Douglas	Richard Douglas	10	21	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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	Signature	Month	Day	Year
Larry Young	Larry Young	10	29	99

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. | Manifest Document No. | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. ~~Waste No.~~
a. HAZARDOUS WASTE, Solid, n.o.s., (contains mercury), 9, NA3077, PGIII (D009)	X	23			X	K
b.	X					
c.						
d.						

13. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 99NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED
EMERGENCY TELEPHONE NUMBER 800-551-4912

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.

GENERATOR

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

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 | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

990621-8595

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P. O. BOX 220
FORT MADISON, IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
P O BOX 220
FORT MADISON, IA 52627

SHIPPING# 2428 OR P.O. #	6/21/99 DATE:	X	PICKUP		DELIVERED

QUANTITY	LAMP TYPE
99 Act	Fluorescent ≤ 4' and Compacts
16 Act	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
63 Act	High Intensity Discharge
Est: 1/10 Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____
178	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190)_/_	4'(80)___	8'___	Steel___
PICKUP	4'(190)_3_	4'(80)___	8'_/_	Steel___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS	BATTERIES QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
		Ballasts (Fluorescent 4' & under)	2	Ni Cad	1/10	
	23 Act	Ballasts (Fluorescent over 4')	2	Lead	1	
1 Act	11 Act	Capacitors				
		Other Items: _____				
		_____	4	◀ TOTAL UNITS RECEIVED		
		_____	NOTES:			
1 Act	34 Act	◀ TOTAL UNITS RECEIVED				

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: [signature]
Date: 6/21/99 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

A-TEC RECYCLING INC.

LAND DISPOSAL RESTRICTION FORM

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 08033

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	Low Hg	NWW	YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Shelly Heston Certify

Print Name: Shelly Heston Date: 6-21-99

Printed on recycled paper

K81755-HZW994A

DATE 02/29/2000

CERTIFICATE OF DISPOSAL

SAFETY-KLEEN, INC.
SAFETY-KLEEN (PECATONICA)
6125 N. PECATONICA ROAD
PECATONICA IL 61063

MAIL TO: CLIMAX MOLYBDENUM CO.
2598 HWY 61
FORT MADISON, IA 52627

PICKUP ADDRESS: CLIMAX MOLYBDENUM CO.
2598 HWY 61
FORT MADISON, IA 52627

EPA ID: IAD000222653

CUSTOMER/MANIFEST NO: 0002-1597-41 - 32239
TRACKING #: 97401408 - IL8873848

THIS IS TO CERTIFY THAT HAZARDOUS MATERIAL REMOVED FROM CLIMAX MOLYBDENUM CO. HAS BEEN DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS IN THE FOLLOWING MANNER.

CONTAINER	DATE	LOCATION	METHOD
23192		PESTICIDES, SOLID, TOXIC, N.O.S. (CHLORDANE,DDT) 6.1 UN2588 PG III (ERG#151)	
906220141733	09-09-1999	SAFETY-KLEEN (DEER PARK), INC. DEER PARK, TX	ROTARY KILN INCINERATOR

OPERATIONS

RECEIVED
MAR 27 2000
COMPANY

STATE OF ILLINOIS

SAFETY-KLEEN CORP. P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
5-[illegible] PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222053 Manifest Document No. 32239
2. Page 1 of

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

3. Generator's Name and Mailing Address: CLIMAX MOLYBDENUM CO. 2598 HWY 61 FORT MADISON IA 52627
Location if Different:
4. Generator's Phone (319) 463-2220

A. Illinois Manifest Document Number: IL 8873848 MANIFEST FEE PAID
B. Generator's IL ID Number: 8130010999
C. Illinois Transporter's ID: UPW2039540H
D. ( ) Transporter's Phone: 319 386-3024
E. Illinois Transporter's ID: UPW2039540H
F. ( ) Transporter's Phone: 2018000[illegible]
G. Facility's IL ID Number:
H. Facility's Phone: 815 259-2377

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. 000701
8. US EPA ID Number: SCD 987574647
9. Designated Facility Name and Site Address: SAFETY-KLEEN (PECATONICA) 6125 N PECATONICA ROAD PECATONICA IL 61063
10. US EPA ID Number: ILD 980502744

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. PESTICIDES, SOLID, TOXIC, N.O.S. (CHLORDANE, DDT) 6.1 UN2588 PG III (ERG#151)	001	DM	00030	G	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
MFST R/T# 97401408 5-047-01-2613
EMERGENCY RESP 800-466-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PO# M32235 SKDOT# A: 23192 B: C: D:

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, and Illinois regulations.

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Printed/Typed Name: [illegible] 7-8-99 Signature: [illegible] DATE Month 07 Day 08 Year 99

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kevin [illegible] Signature: [illegible] DATE Month 07 Day 08 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: George R Holtz Jr Signature: [illegible] DATE Month 07 Day 16 Year 99

19. Discrepancy Indication Space
SENT TO I.E.P.A.
AUG 20 1999

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: Jeff Gibbons Signature: [illegible] DATE Month 07 Day 22 Year 99

SPRINGFIELD, ILLINOIS

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1969, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

In case of a spill call the Illinois Office of Emergency Response at [illegible]

A)3918067/3008524

COPY 3. TSD COPY

STATE OF ILLINOIS
SAFETY-KLEEN CORP.
STATE PRESCRIBED FORM
5-047-01

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH

EPA Form 8700-22 (6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222853
Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: CELMAR MOLYBDENUM CO. 2598 HWY 61 FORT MADISON IA 52627
Location if Different:
4. Generator's Phone (319) 463-2220

A. Illinois Manifest Document Number: IL 8873848 MANIFEST FEE PAID
B. Generator's IL ID Number: 9190019999
C. Illinois Transporter's ID: UPW2039540H
D. ( ) Transporter's Phone: 319 386-3024
E. Illinois Transporter's ID: UPW2039540H
F. ( ) Transporter's Phone: 813 576-1085
G. Facility's IL ID Number: 2018000007
H. Facility's Phone: 815 299-2377

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. 000701
8. US EPA ID Number: SCD 987574647
9. Designated Facility Name and Site Address: SAFETY-KLEEN (PECATONICA) 6125 N PECATONICA ROAD PECATONICA IL 61063
10. US EPA ID Number: ILD 980502744

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. PESTICIDES, SOLID, TOXIC, N.O.S. (CHLORDANE, DDT) 6.1 UN2588 PG III (ERG#151)	001	DM	[illegible]	G	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
MFST R/T# 97401408 5-047-[illegible]
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
SKDOT# A: 23192 B: C: D:

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, and Illinois regulations.

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Printed/Typed Name | Signature | DATE Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | DATE Month Day Year

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

GENERATOR

TRANSPORTER

FACILITY

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center

A 3 3 1 3 8 6 7 / 3 0 0 3 5 4

COPY 6. GENERATOR COPY

81363-R4845
PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

PREQUALIFICATION EVALUATION

COMPLETED: 05/18/99
REVISED: 06/18/99
RUN: 06/19/99

ACCEPT FOR SHIPMENT

CONTROL #: 3918867-7
LAB #: 9918867-1
PROFILE REF #: 3008524

BRANCH/SUBMITTER: 504701
DAVENPORT

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-2613

CLIMAX MOLYBDENUM CO.
2598 HWY 61
FORT MADISON IA 52627

ATTN: SHELLY HOUSTON

BRANCH: 504701 - DAVENPORT

A. GENERATOR INFORMATION:
GENERATOR NAME & FACILITY ADDRESS:
CLIMAX MOLYBDENUM CO.
2598 HWY 61
FORT MADISON IA 52627
CONTACT: SHELLY HUSTON
PHONE: 319-463-2220

BILLING COMPANY & ADDRESS:

STATUS: CESQG US EPA ID: IAD000222653 STATE ID: IA 9190019999

B. SHIPPING INFORMATION:
DOT SHIP NAME: PESTICIDES, SOLID, TOXIC, N.O.S. (CHLORDANE,DDT) 6.1 UN2588
PG III (ERG#151)
HAZ CLASS/DIVISION: RQ ID# (UN/NA): PACK GRP:

NON-BULK SHIPPING CONTAINERS
55 STEEL QTY: 2 FREQ: ONE TIME

DATE OF LAST WASTE SHIPMENT: / /

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 3918867-7
DAVENPORT LAB #: 9918867-1
PROFILE REF #: 3008524

C. GENERAL MATERIAL & REGULATORY INFORMATION:
NAME OF MATERIAL: BULK PACKED PESTICIDES (SOLIDS)
PROCESS DESCRIPTION: HOUSEHOLD HAZ WASTES
ODOR: STRONG

YES	NO		
	X	REGULATED OR LICENSED RADIOACTIVE WASTE	
	X	REGULATED MEDICAL / INFECTIOUS WASTE	
	X	WASTE SUBJECT TO BENZENE NESHAP REGULATIONS	
	X	TSCA REGULATED PCB WASTE	
	X	REGULATED SUBPART CC WASTE (VOC'S >= 500 PPM)	
	X	REGULATED OZONE DEPLETING SUBSTANCE	
	X	CERCLA REGULATED (SUPERFUND) WASTE	
	X	HAZARDOUS DEBRIS	
	X	WASTE CONTAINS UHC'S/CONSTITUENTS OF CONCERN	
	X	UHC IN SECTION D	
	X	UHC IN ADDENDUM	
X		MEETS LDR STANDARDS	
	X	PARTIALLY MEETS (FOR LANDFILL ONLY)	
	X	SORBENT ADDED	
	X	BIODEGRADABLE?	
X		EXEMPT WASTE; IF YES, LIST REFERENCE 40 CFR	261.4(B)(1)
	X	STATE HAZARDOUS WASTE	261.4(B)(1)
	X	EPA HAZARDOUS WASTE	261.4(B)(1)

EPA WASTE CODES: NONE

D. MATERIAL COMPOSITION:
1. CHEMICAL/PHYSICAL CONSTITUENTS:

E. REACTIVE CHARACTERISTICS:

YES	NO		
	X	EXPLOSIVE	
	X	SHOCK SENSITIVE	
	X	PYROPHORIC	
	X	OXIDIZER	
	X	WATER REACTIVE	
	X	AIR REACTIVE	
	X	REACTIVE CYANIDE	.0
	X	REACTIVE SULFIDE	.0
	X	POLYMERIZABLE	

OTHER INCOMPATIBLES:
KEEP AWAY FROM FOOD

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70F:
PH NON-AQUEOUS

PROFILE COMMENTS:
PAPERWORK PREQUAL

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES
COMPLETED: 05/18/99
REVISED: 06/18/99
RUN: 06/19/99

ACCEPT FOR SHIPMENT

CONTROL #: 3918867-7
LAB #: 9918867-1
PROFILE REF #: 3008524

BRANCH/SUBMITTER: 504701
DAVENPORT

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP PART NUMBER: 0874174 TFS NH SD LF 30G
REVIEW DATE: 05/18/1999 REVIEWERS: MAP

$89.00

APPROVED FACILITIES:
SAFETY-KLEEN (PECATONICA), INC
6125 N PECATONICA ROAD
PECATONICA, IL 61063
FED EPA#: ILD980502744
STATE EPA#: 2018000002
TELEPHONE: 8152392377
STATE AUTH:
ADD DESC: 3008524-PDCMD (LF-PES-01)

APPROVED DOT - SHIPPING DESCRIPTION
0023192 DRUM OR BULK PESTICIDES, SOLID, TOXIC, N.O.S. (CHLORDANE,DDT) 6.1 UN2588 PG III (ERG#151)

US EPA WASTE CODES: NONE
USA

REVIEW COMMENTS:
****
*
* OK FOR INCINERATION. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO
* BE EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED
* FROM THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK
* TSDF.
*
* THIS WASTE MUST BE SHIPPED IN "X, Y OR Z" DOT RATED CONTAINERS.
*
* DO NOT SHIP THIS WASTE DIRECTLY TO A TSDF. WASTE MUST BE SHIPPED TO THE SERV
* CE CENTER FIRST.
*
* SCHEDULE WITH PECATONICA. WRITE APPROVAL ON DRUMS AND MANIFEST
* (3008524-PDCMD). PROFILE EXPIRES 4/20/2000
****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

*** ACCEPT FOR SHIPMENT

END OF DOCUMENT

STATE OF ILLINOIS — ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

SAFETY-KLEEN CORP. — P.O. BOX 19276 — SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

5-047-01 STATE PRESCRIBED FORM — State Form LPC 62 8/81 IL532-0610 — FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH — EPA Form 8700-22 (6-89) — Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 — Manifest Document No. 32262

2. Page 1 of 1

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

3. Generator's Name and Mailing Address / Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

A. Illinois Manifest Document Number: IL 8873846 — MANIFEST FEE PAID

4. Generator's Phone (319) 463-7151

B. Generator's IL ID Number: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC

6. US EPA ID Number: ILD 984908202

C. Illinois Transporter's ID: UPW2039540H

D. (319) 386-3024 Transporter's Phone

7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC.

8. US EPA ID Number: SCD 987574647

E. Illinois Transporter's ID: UPW2039540H

000654

F. (866) 576-1085 Transporter's Phone

9. Designated Facility Name and Site Address:
SAFETY-KLEEN SYSTEMS, INC
633 E 138TH ST
DOLTON, IL 60419

10. US EPA ID Number: ILD 980613913

G. Facility's IL ID Number: 031069000

H. Facility's Phone: 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE FLAMMABLE LIQUIDS, N.O.S. (ISOBUTYL ALCOHOL) 3 UN1993 PG III (D001) (ERG#128)	001	DM	00020	G	EPA HW Number D001
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14: M061

15. Special Handling Instructions and Additional Information
MFST R/T# 97400451 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PP#M32262 SKDOT# A: 3767 B: C: D:

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, and Illinois regulations.

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Printed/Typed Name	Signature	Date (Month Day Year)
Richard C. Holbert Amax 7-8-99	Richard C. Holbert Amax 7-8-99	07 08 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Cite		07 08 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Fred Barth	Fred Barth	7 12 99

FACILITY

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	Signature	Date (Month Day Year)
V. White	V. White	07 13 99

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

)1921986/2124678 COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

STATE OF ILLINOIS
SAFETY-KLEEN CORP.
STATE PRESCRIBED FORM

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH

EPA Form 8700-22 (6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. [illegible] Manifest Document No.
2. Page 1 of

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

3. Generator's Name and Mailing Address: [illegible] CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
Location if Different:

4. Generator's Phone (319) 463-7151

A. Illinois Manifest Document Number: IL 8873846 MANIFEST FEE PAID

B. Generator's IL ID Number: 9190019999

C. Illinois Transporter's ID: UPW2039540H

D. ( ) Transporter's Phone: [illegible]-3024

E. Illinois Transporter's ID: UPW2039540H

F. ( ) Transporter's Phone: 414 576-1065

G. Facility's IL ID Number: 031069

H. Facility's Phone: 708 849-4850

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984906302

7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. 000654
8. US EPA ID Number: SCD 987514647

9. Designated Facility Name and Site Address: SAFETY-KLEEN SYSTEMS, INC
655 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE FLAMMABLE LIQUIDS, N.O.S. (ISOBUTYL ALCOHOL) 3 UN1993 PG III (D001) (ERG#128)	[illegible]	DM	[illegible]	G	EPA HW Number D001
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information
MFST R/T# [illegible] 5-047-01-[illegible]
EMERGENCY RESP 800-468-1760 (24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
SKDOT# A: 37-7 B: C: D:

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, and Illinois 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 | Signature | DATE Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | DATE Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | DATE 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 | Signature | DATE Month Day Year

GENERATOR

TRANSPORTER

FACILITY

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

A)1921986/2124678

COPY 6. GENERATOR COPY

LDR NOTIFICATION FORM

GENERATOR NAME: CLIMAX MOLYBDENUM CO MANIFEST NO. JL8873846 FE 32262
MANIFEST PAGE/LINE# 11A

PURSUANT TO 40 CFR 268.7(A), I HEREBY NOTIFY THAT THIS SHIPMENT CONTAINS WASTE RESTRICETED UNDER 40 CFR PART 268 LAND DISPOSAL RESTRICTIONS (LDR).

A. GENERAL WASTE NOTIFICATION

EPA WASTE CODES & LDR SUBCATEGORIES (IF ANY)
D001 LIQUID >= 10% TOC

TREATABILITY GROUP: NONWASTEWATERS

WASTE CONSTITUENT NOTIFICATION:

LEGEND NUMBER	CONSTITUENT
100	O-CRESOL
101	M-CRESOL (DIFFICULT TO DISTINGUISH FROM P-CRESOL)
102	P-CRESOL (DIFFICULT TO DISTINGUISH FROM M-CRESOL)
173	ISOBUTYL ALCOHOL
245	XYLENES-MIXED ISOMERS (SUM OF O-, M-, AND P-XYLENE CONCENTRATIONS)

Richard Hilbert R. Hilbert Supv. 7-8-99 07/08/99

GENERATOR'S AUTHORIZED SIGNATURE | NAME & TITLE (PRINTED OR TYPED) | DATE

S-K PROFILE REFERENCE NUMBER: 2124678 CONTROL NUMBER: 1921986-9

81363-R4747 (REPRINT) PREQUALIFICATION EVALUATION PAGE 1 OF
PARTS WASHER SERVICE COMPLETED: 06/09/99
LIQUID RECOVERY SERVICES REVISED:
RUN: 06/22/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1921986-9
DAVENPORT LAB #: 9921986-7
PROFILE REF #: 2124678

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-5062

CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

ATTN: SHELLY HESTON

BRANCH: 504701 - DAVENPORT

A. GENERATOR INFORMATION:

GENERATOR NAME & FACILITY ADDRESS:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
PHONE: 319-463-7151

BILLING COMPANY & ADDRESS:
CLIMAX MOLYBDENUM CO
PO BOX 172288
DENVER CO 80217

S.I.C.: 33139901
STATUS: LQG US EPA ID: IAD000222653 STATE ID: IA

B. SHIPPING INFORMATION: DOT ASSISTANCE REQUESTED
DOT SHIP NAME: RQ WASTE FLAMMABLE LIQUIDS, N.O.S. (ISOBUTYL ALCOHOL) 3 UN1993 P (D001) (ERG#128)
HAZ CLASS/DIVISION: RQ ID# (UN/NA): PACK GRP:

NON-BULK SHIPPING CONTAINERS
55 STEEL QTY: 55 FREQ: YEARLY

DATE OF LAST WASTE SHIPMENT: / /

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1921986-9
DAVENPORT LAB #: 9921986-7
PROFILE REF #: 2124678

C. GENERAL MATERIAL & REGULATORY INFORMATION:
NAME OF MATERIAL: FUEL CONDITIONER
PROCESS DESCRIPTION: UNUSED MATERIAL
ODOR: NONE

YES	NO	
	X	REGULATED OR LICENSED RADIOACTIVE WASTE
	X	REGULATED MEDICAL / INFECTIOUS WASTE
	X	WASTE SUBJECT TO BENZENE NESHAP REGULATIONS
	X	TSCA REGULATED PCB WASTE
	X	REGULATED SUBPART CC WASTE (VOC'S >= 500 PPM)
	X	REGULATED OZONE DEPLETING SUBSTANCE
	X	CERCLA REGULATED (SUPERFUND) WASTE
	X	HAZARDOUS DEBRIS
	X	WASTE CONTAINS UHC'S/CONSTITUENTS OF CONCERN
	X	UHC IN SECTION D
	X	UHC IN ADDENDUM
	X	MEETS LDR STANDARDS
	X	PARTIALLY MEETS (FOR LANDFILL ONLY)
	X	SORBENT ADDED
	X	BIODEGRADABLE?
	X	EXEMPT WASTE; IF YES, LIST REFERENCE 40 CFR
	X	STATE HAZARDOUS WASTE
	X	EPA HAZARDOUS WASTE

STATE WASTE CODES: TX OUTS203H CTRY: USA
EPA WASTE CODES: D001
ORIGIN CD: SOURCE CD: FORM CD: SYSTEM CD:

D. MATERIAL COMPOSITION:
1. CHEMICAL/PHYSICAL CONSTITUENTS:

BUTYL ALCOHOL, ISO-		8.2 WT%
HIGH-BOILING HYDROCARBONS (C14-C20)		1.2 WT%
CRESOLS (METHYLPHENOLS, ORTHO-, META-, & PARA-)	(D026)	.2 WT%
XYLENES (ORTHO-, META-, AND PARA-)		.0 WT%
NON-VOLATILE ORGANICS		91.0 WT%
WATER CONTENT		.1 WT%

E. REACTIVE CHARACTERISTICS:

YES	NO		
	X	EXPLOSIVE	
	X	SHOCK SENSITIVE	
	X	PYROPHORIC	
	X	OXIDIZER	
	X	WATER REACTIVE	
	X	AIR REACTIVE	
	X	REACTIVE CYANIDE	.0
	X	REACTIVE SULFIDE	.0
	X	POLYMERIZABLE	

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1921986-9
LAB #: 9921986-7
PROFILE REF #: 2124678

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70F:

# OF PHASES	1.000
LIQUID %	100.000
COLOR	DK GREEN
VISCOSITY	<50
DENSITY	0.920
FLASH AT	140.000
ASH %	1.000
PH NON-AQUEOUS	
PH	7.300
BTU'S / LB. OR RANGE	19000.000

COMMENTS: BULK DENSITY: 0.92 WATER COMPATIBILITY: COMPATIBLE
NVR ESTIMATED BY DIFFERENCE ON TOTAL.

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1921986-9
LAB #: 9921986-7
PROFILE REF #: 2124678

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP PART NUMBER: 0087100 WASTE,SPEC FUEL 55-1
REVIEW DATE: 06/09/1999 REVIEWERS: AS

APPROVED FACILITIES:

SAFETY-KLEEN SYSTEMS, INC.
3700 LAGRANGE ROAD
SMITHFIELD, KY 40068
FED EPA#: KYD053348108
STATE EPA#:
TELEPHONE: 5028452453
STATE AUTH:

SAFETY-KLEEN SYSTEMS, INC.
633 E 138TH ST
DOLTON, IL 60419
ILD980613913
0310690006
7088494850

SAFETY-KLEEN SYSTEMS, INC.
1722 COOPER CREEK ROAD
DENTON, TX 76208
FED EPA#: TXD077603371
STATE EPA#: 65124
TELEPHONE: 9404835200
STATE AUTH:

APPROVED DOT - SHIPPING DESCRIPTION
0003767 DRUM OR BULK RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
(ISOBUTYL ALCOHOL)
3 UN1993 PG III (D001) (ERG#128)

STATE/PROV. CODES: TX OUTS203H
US EPA WASTE CODES: D001
USA

REVIEW COMMENTS:

****

* THIS WASTE MUST BE SHIPPED IN "X, Y OR Z" DOT RATED CONTAINERS.
*
* OK FOR FUEL. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE
* EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM
* THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.

****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

COMPLETED: 06/09/99
REVISED:
RUN: 06/22/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1921986-9
LAB #: 9921986-7
PROFILE REF #: 2124678

ADDITIONAL ANALYTICAL

RESULT DESCRIPTION/ELEMENT	RESULT
NON-VOLATILE ORGANICS	91
PCB	NONE
PCB AMOUNT	
OTHER	< 1.0 MKG
RADIOACTIVITY	NONE DETECTED
WATER COMPATIBILITY	COMPATIBLE
WATER CONTENT	<0.10
	<0.10

THE ANALYSIS CONTAINED HEREIN ARE PERFORMED SOLELY FOR THE PURPOSE OF QUALIFYING THE ANALYZED MATERIALS FOR ACCEPTANCE BY SAFETY-KLEEN CORP. IN ACCORDANCE WITH ITS PERMITS AND PROCESSING CAPABILITIES.

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE IS REQUIRED.

*** ACCEPT FOR SHIPMENT

END OF DOCUMENT

No. 3155-0 Date: 10/21/99

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2589 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number WIJ819985 **Received by us on** 10/11/99

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-0

Kandylee Schmidt

Authorized Signature

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 144, Wis. Stats.
Form 4400-66P Rev. 3-97

WISCONSIN DEPT OF NATURAL RESOURCES

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Solid and Hazardous Waste Mgt.
Box 8094
Madison, Wisconsin 53708

FOR DNR USE ONLY

Form designed for use on elite (12-pitch) typewriter.

Form Approved. OMB No. 2050-0039. Expires 9-30-

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: I A D 0 0 0 2 2 2 6 5 3
Manifest Document No.: 1 9 9 8 5
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Climax Molybdenum, 2598 Hwy 61
Site Location If Different:
4. Generator's Phone (319) 463-2224 Ft. Madison, IA 52627

A. State Manifest Document Number: WI J819985
B. State Generator's ID:

5. Transporter 1 Company Name: DAHLEN TRANSPORT
6. US EPA ID Number: M N D 0 2 2 9 6 9 0 2 6
C. State Transporter's ID:
D. Transporter's Phone (940) 479-20

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: EOG Disposal, Inc., 5611 W. Hemlock Street, Milwaukee, WI 53223
10. US EPA ID Number: W I D 9 8 8 5 0 0 0 5 6
G. State Facility's ID:
H. Facility's Phone: (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Acetone, 3, UN1090, PG-II	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above: 3155-0;19991164;Spent Acetone;(ERG#127)

K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 534-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title: | Signature: | Date (Month Day Year):

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title: [illegible] | Signature: [illegible] | Date (Month Day Year):

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title: | Signature: | Date (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 & Position Title: Martin W. Schmit Plant Mngr | Signature: Martin W. Schmit | Date (Month Day Year): 10 11 99

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain

Copies 1 & 3 mail to Wis. DNR at above address.

Emergency 24 Hour Assistance Telephone Number
In Wisconsin (608) 266-3232
Outside Wisconsin (800) 424-8802

COPY 5-
FACILITY SEND TO GENERATOR

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 144, Wis. Stats.
Form 4400-66P Rev. 3-97

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

Form designed for use on elite (12-pitch) typewriter.

State of Wisconsin
Department of Natural Resources
Bureau of Solid and Hazardous Waste Mgt.
Box 8094
Madison, Wisconsin 53708

FOR DNR USE ONLY

Form Approved. OMB No. 2050-0039. Expires 9-3(

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. I A D 0 0 0 2 2 2 6 5 3	Manifest Document No. 1 9 9 8 5	2. Page 1 of 1	Information in the shaded area is not required by Federal law

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
Ft. Madison, IA 52627

Site Location If Different

4. Generator's Phone (319)463-2224

A. State Manifest Document Number WI 1819985

B. State Generator's ID

5. Transporter 1 Company Name
DAHLEN TRANSPORT

6. US EPA ID Number M N D 0 2 2 9 6 9 0 2 6

C. State Transporter's ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (940)479-2(

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
EOG Disposal, Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223

10. US EPA ID Number W I D 9 8 8 5 8 0 0 5 6

G. State Facility's ID

H. Facility's Phone (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Acetone, 3, UN1090, PG-II	001	DM	22DM	G	D 0 1 0
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
3155-0;19991164;Spent Acetone;(ERG#127)

K. Handling Codes for Wastes Listed Abov

15. Special Handling Instructions and Additional Information:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title	Signature	Date (Month Day Year)
		12 5

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Steven Ahlers		12 5

8. TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

Discrepancy Indication Space

FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

ed/Typed Name & Position Title	Signature	Date (Month Day Year)

8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain
Copies 1 & 3 mail to Wis. DNR at above address.

24 Hour Assistance Telephone Number
n (608) 266-3232
consin (800) 424-8802

COPY 2- GENERATOR RETAIN

GENERATOR

EOG Disposal, Inc.
WID988580056
5611 W. Hemlock St.
Milwaukee, WI 53223
414/353-1156 FAX: 414/353-1822

Generator Name: Climax Molybdenum

EPA ID#: IAD000222653

Manifest Number: WI J819985

Hazardous Waste Restricted from Land Disposal Certification

Line item A (A, B, C or D) is subject to the land disposal restrictions of 40CFR Part 268. In accordance with 40 268.7, this generator is providing notice that the waste does not meet the treatment standards specified in Part 268 Subpart D does not meet the prohibitions specified in 268.32 or RCRA section 3004 (d).

_____ The shipment contains F001 - F005 spent solvents (Complete Table A, page 2)

X The shipment contains other Land Disposal Restricted materials. List all US EPA hazardous waste codes that apply t this waste shipment. (Complete Table B, page 3) (D001 CMBST)

_____ The shipment contains F039 multi-source leachate, or D001 (DEACT), D002 (DEACT) waste prohibited under 40 CF Section 268.37 or D012 through D043 waste prohibited under the revision to 40 CFR Section 268.48. (Complete Table B, pag and/or Table C, page 4)

_____ The shipment contains labpacks (Complete Table D, page 6)

Waste Management. Using the following guidelines based on 40CFR 268.7, enter the appropriate letter in the "Management" column located on Table B.

A. RESTRICTED WASTE REQUIRING FURTHER TREATMENT. This waste must be treated in the applicable treatment standards set forth in 40CFR part 266 subpart D, 268.32, or RCRA Section 3004(d). For "Hazardous Debris", this hazardous debris is subject to the alternative treatment standards of 40CFR 268.45.

RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS. " I certify under penalty of law that I have persona examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance le specified in 40CFR 268 subpart D, and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS A SPECIFIED TECHNOLOGY AND THE WASTE H BEEN TREATED BY THAT TECHNOLOGY. " I certify under penalty of law that the waste has been treated in accordanc with the requirements of 40CFR 268.42. I am aware that there are significant penalties for submitting a false certificat including the possibility of fine and imprisonment.

D. GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the non wastewater organic constituents have been treated by incineration in units operatec accordance with 40CFR Part 264 Subpart O or 40CFR Part 265 Subpart D or by combustion in fuel substitution units ir accordance with applicable technical requirements, and I have been unable to detect the non-wastewater organic constituents despite having used good faith efforts to analyze for such constituents. I am aware that there are significa penalties for submitting a false certification, including the possibility of fine and imprisonment.

E. RESTRICTED WASTE SUBJECT TO A VARIANCE. This waste is subject to a national capacity variance, a treatable var or a case - by - case extension. Enter the effective date of the prohibition in this column as well. For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40CFR Part 265.45."

RESTRICTED WASTE WHICH CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT. " I have determined that t waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition le set forth in Section 268.32, or RCRA Section 3004(d), and therefore can be land disposed without further treatment."

copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. " I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40CFR Part 268 subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I have submitted is true, accurate, and comple I am aware that there are significant penalties for submitting false certification including the possibility of a fine and imprisonment."

WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS. This waste is a newly identified waste that is nc currently subject to any 40CFR 265 restrictions.

TABLE A

Treatment Standards for F001 - F005 Spent Solvents

Waste Code	Constituents of Concern	Non-Wastewater	
		Total compostion mg/kg	TCLP mg/L
F001 □	Carbon Tetrachloride	6	-
F001 □	Methylene Chloride	30	-
F001 □	Tetrachloroethylene	6	-
F001 □	1,1,1-Trichloroethane	6	-
F001 □	Trichloroethylene	6	-
F001 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F001 □	Trichloromonofluoromethane	30	-
F002 □	Chlorobenzene	6	-
F002 □	o-dichlorobenzene	6	-
F002 □	Methylene Chloride	30	-
F002 □	Methylene Chloride (Pharmaceutical Industry)	-	-
F002 □	Tetrachloroethylene	6	-
F002 □	1,1,-Trichloroethane	6	-
F002 □	1,1,2-Trichloroethane	6	-
F002 □	Trichloroethylene	6	-
F002 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F002 □	Trichloromonofluoromethane	30	-

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F003 □	Acetone	160	-
F003 □	n-Butyl Alcohol	2.6	-
F003 □	Cyclohexanone		0.75
F003 □	Ethyl Acetate	33	-
F003 □	Ethyl Benzene	10	-
F003 □	Ethyl Ether	160	-
F003 □	Methanol		0.75
F003 □	Methyl Isobutyl Ketone	33	
F003 □	Xylenes (total)	30	-
F004 □	Cresol	5.6	-
F004 □	Nitrobenzene	14	-
F005 □	Benzene	10	-
F005 □	Carbon Disulfide		4.8
F005 □	2-Ethoxyethanol	INCIN	
F005 □	Isobutyl Alcohol	170	
F005 □	Methyl Ethyl Ketone	36	
F005 □	2-Nitropropane	INCIN	
F005 □	Pyridine	16	
F005 □	Toluene	10	

TABLE B

Waste Code	Non-waste water	Treatment Sub-category (if applicable, or NONE)	Technology Standards or Management (A-G based on list shown on pages 1/2)
☐ D001		Ignitable Liquids based on 40 CFR 261.21 except for the 261.21 (a)(1) High TOC Subcategory, managed in Non-CWA/Non CWA equivalent, non Class 1 SDWA Systems	DEACT & meet UTSD, or RORGS, or CMBST
☐ D001		Ignitable characteristic wastes, except for the 261.21 (a)(1) High TOC Subcategory, that are managed in CWA/CWA-equivalent Class 1 SDWA Systems.	DEACT
■ D001	NWW	Ignitable liquids based on 40 CFR 261.2 (a)(1) High TOC Ignitable Liquid Subcategory - greater than or equal to 10% TOC	RORGS or CMBST A

TABLE C

If D001, D002, or D012 through D043 requires treatment to 268.40 standards, then each underlying hazardous constituent present in the waste at the point of generation and at a level above the UTS constituents listed treatment standard must be checked.

If D001 or D002 requires treatment of deactivation and meets F039 standards then each underlying hazardous constituent present in the waste at the point of generation and at a level above the F039 and UTS constituent listed treatment standard mus be checked.

IF THERE ARE NO UTS CONSTITUENTS PRESENT IN THE WASTE UPON IT'S INITIAL GENERATION CHECK HERE ☐

Check the underlying individual constituents likely to be present from the list below:

	Regulated Constituent	WW	NWW
	Acenaphthylene	0.059	3.4
	acenaphthene	0.059	3.4
	Acetone	0.28	160
	Acetonitrile	5.6	1.8[2]
	Acetophenone	0.010	9.7
	2-Acetylaminofluorene	0.059	140
	Acrolein	0.29	NA
	Acrylamide	19[2]	23[2]
	Acrylonitrile	0.24	84
	Aldrin	0.021	0.066
	4-Aminobiphenyl	0.13	NA
	Aniline	0.81	14
	Anthracene	0.059	3.4
	Aramite	0.36	NA
	alpha-BHC	0.00014	0.066
	beta-BHC	0.00014	0.066
	delta-BHC	0.023	0.066
	gamma-BHC (Lindane)	0.00017	0.066
	Benzene	0.14	10
	Benz (a) anthracene	0.059	3.4
	Benzal chloride	0.055[2]	60[2]
	Benzo (b) fluoranthene	0.11	68
	Benzo (k) fluoranthene	0.11	68
	Benzo (g,h,i,) perylene	0.0055	18
	Benzo (a) pyrene	0.061	34
	Bromodichloromethane	0.35	15
	Bromoform (Tribromomethane)	0.63	15
	Bromomethane (methyl bromide)	0.11	15
	4-Bromophenyl phenyl ether	0.0055	15
	n-Butanol (n-butyl alcohol)	5.6	2.6
	Butyl benzyl phthalate	0.017	28
	2-sec Butyl 4,6 dinitrophenol (Dinoseb)	0.066	2.5
	Carbon Disulfide	3.8	1.8[1,2]
	Carbon Tetrachloride	0.057	6.0
	o-Dichlorobenzene	0.088	6.0
	p-Dichlorobenzene	0.090	6.0
	Dichlorodifluoromethane	0.23	7.2
	1,1-Dichloroethane	0.59	6.0
	1,2-Dichloroethane	0.21	6.0
	1,1-Dichloroethylene	0.025	6.0
	trans-1,2-Dichloroethylene	0.054	30
	2,4-Dichlorophenol	0.044	14
	2,6-Dichlorophenol	0.044	14
	1,2-Dichloropropane	0.85	18
	cis-1,3-Cichloropropylene	0.036	18
	trans-1,3-Dichloropropylene	0.036	18
	Dieldrin	0.017	0.13.
	Diethyl phthalate	0.20	28
	o-Dimethylaminoazobenzene	0.13	NA
	2,4-Dimethyl Phenol	0.036	14
	Dimethyl Phthalate	0.047	28
	Di-n-butyl Phthalate	0.057	28
	1,4-Dinitrobenzene	0.32	2.3
	4,6-Dinitro-o-cresol	0.28	160

	Regulated Constituent	WW	NWW
	chlordane (alpha & gamma)	0.0033	0.26
	p-Chloroaniline	0.46	16
	Chlorobenzene	0.057	6.0
	Chlorobenzilate	0.10	NA
	2-chloro-1,3 butadiene	0.057	0.28[2]
	Chlorodibromomethane	0.27	15
	Chloroethane	0.036	6.0
	bis-(2-Chloroethoxy) methane	0.033	7.2
	bis-(2-Chloroethyl) ether	0.033	6.0
	Chloroform	0.046	6.0
	bis-(2-Chloroisopropyl) ether	0.055	6.0
	p-Chloro-m-cresol	0.018	14
	2-Chloroethyl Vinyl ether	0.062[2]	NA[2]
	Chloromethane (methyl chloride)	0.19	30
	2-Chloronaphthalene	0.055	5.6
	2-Chlorophenol	0.044	5.7
	3-Chloropropylene	0.036	30
	Chrysene	0.059	3.4
	o-Cresol	0.11	5.6
	Cresol (m- and p- isomers)	0.77	5.6
	Cyclohexanone	0.36	0.75[2]
	1,2-Dibromo-3-Chloropropane	0.11	15
	1,2-Dibromoethane (Ethylene dibromide)	0.028	15
	Dibromomethane	0.11	15
	2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
	o,p-DDD	0.023	0.087
	p,p-DDD	0.023	0.087
	o,p-DDE	0.031	0.087
	p,p-DDE	0.031	0.087
	o,p-DDT	0.0039	0.087
	p,p-DDT	0.0039	0.087
	Dibenz (a,h) anthracene	0.055	8.2
	Dibenz (a,e) pyrene	0.061	NA
	m-Dichlorobenzene	0.036	6.0
	Fluoranthene	0.068	3.4
	Fluorene	0.059	3.4
	Heptachlor	0.0012	0.066
	Heptachlor epoxide	0.016	0.066
	Hexachlorobenzene	0.055	10
	Hexachlorobutadiene	0.055	5.6
	Hexachlorocyclopentadiene	0.057	2.4
	Hexachlorodibenzo-furans	0.000063	0.001
	Hexachlorodibenzo-p-dioxins	0.000063	0.001
	Hexachloroethane	0.055	30
	Hexachloropropylene	0.035	30
	Indeno (1,2,3-c,d) pyrene	0.0055	3.4
	Iodomethane	0.19	65
	Isobutanol (Isobutyl Alcohol)	5.6	170
	Isodrin	0.021	0.066
	Isosafrole	0.081	2.8
	Kepone	0.0011	0.13
	Methacrylonitrile	0.24	84
	Methanol	5.6	0.75[1,2]
	Methapyrilene	0.081	1.5

Regulated Constituent	WW	NWW
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propylnitrosoamine	0.40	14
1,4-Dioxane	NA	170
Diphenylamine [4]	0.92	13 [3]
Diphenylnitrosoamine [4]	0.92	13 [3]
1,2-Diphenyl hydrazine	0.087	NA
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160
bis-(2-Ethylhexyl) phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
PCB's (Total all isomers or Aroclors)	0.10	10
Pentachlorobenzene	0.55	10
Pentachloroethane	0.55 [3]	6.0 [3]
Pentachlorodibenzo-furans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
Phorate	0.021	4.6
Phthalic acid	0.55 [3]	28 [3]
Phthalic anhydride	0.055	28 [3]
Pronamide	0.93	15
Pyrene	0.067	82
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	79
2,4,5-T	0.72	79
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzo-furans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.80	10
Toxaphene	0.0095	2.6

Regulated Constituent	WW	NWW
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene-bis-(2-chloroaniline)	0.50	30
Methylene chloride	0.089	30
Methyl Ethyl Ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methanesulfonate	0.018	NA
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27 [3]	14 [3]
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028 [3]	13 [3]
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3 [2]
N-Nitroso-di-n-butylamine	0.40	17
N-Nitrosomethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
1,2,4-Trichlorobenzene	0.55	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluorethane	0.057	30
Tris-(2,3-dibromopropyl)phosphate	0.11	0.10 [2]
Vinyl chloride	0.27	6.0
Xylene (sum of o-, m-, and p-isomers)	0.32	30
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30 [1]
Arsenic	1.4	5.0 [1]
Barium	1.2	7.6 [1]
Beryllium	0.82	0.014 [1,2]
Cadmium	0.69	0.19 [1]
Chromium (Total)	2.77	0.86 [1]
Fluoride	35	NA
Lead	0.69	0.37 [1]
Mercury (Not from Retorting)	0.15	0.025 [1]
Antimony	1.9	2.1 [1]
Nickel	3.98	5.0 [1]
Selenium	0.82	0.16 [1]
Silver	0.43	0.30 [1]
Sulfide	14	NA
Thallium	1.4	0.078 [1,2]
Vanadium	4.3	0.23 [1,2]
Zinc	2.61 [3]	NA

1. These concentrations are expressed in mg/L and are measured through an analysis of TCLP extract; all others are measured through a total waste analysis.
2. These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.
3. Zinc is not an Underlying Hazardous Constituent requiring treatment in D001, D002, or D012-D043 wastes.
4. These compounds are regulated by the sum of their concentration instead of as individual constituents.

NOTE: Wastewater units are in mg/L, non-wastewater are in mg/Kg.

TABLE D
LAB PACK CERTIFICATION

(268.42, Appendix iv)

1. APPENDIX IV DRUMS:
This notification and certification applies to the following drums on this shipment. List the Lab Pack drum identification numbers below:

2. ALL DRUMS THAT MAY NOT BE PACKAGED AS APPENDIX IV TYPE LABPACKS:
The US EPA Hazardous waste codes are D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P0 P012, P076, P078, U134, U151. The alternative treatment standard is incineration (INCIN). This notification applies tc those wastes in the following drums on this shipment. List the Lab Pack drum identification numbers below:

CERTIFICATION:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40 CFR 268.32 or RCRA Section 3004(d). I believe that 40 CFR Part 268 Subpart D, and all applicable prohibitions set forth in information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

I hereby certify that all information in this and all associated documents is complete and accurate to the best of my knowledge and information has all the necessary permits and licenses for the waste that has been identified by the profile, if approved for management.

Authorized Representative Signature: X Shelly Heaton

Print or Type Name: X Shelly Heaton

Title: X Environmental Manage Date: X 10/5/99

N:\USER\FORMS\BLANKS\LAND_BAN.4

CERTIFICATE OF RECYCLING

***A-TEC Recycling Inc.** hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.*

Processing
Date: 3-Nov-99

Receiving
Number: 991026-9395

Items Received and Recycled

Quantity	Description
145	Fluorescent 4' and Under
15	High Intensity Discharge (HID)
28	Fluorescent Greater than 4'
6	Ballasts - non PCB
3	Non-PCB Capacitors
1.1	Batteries - Lead Acid (lbs)
0.2	Batteries - Alkaline (lbs)
0.4	Batteries - Lithium (lbs)

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 172286
DENVER, CO 80217--2286

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE November 3, 1999

Please print or type. (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. I A D 0 0 0 2 2 2 6 5 3 — Manifest Document No. 108684

2. Page 1 of 1

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

GENERATOR

Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FORT MADISON, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: I A O 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A O 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid , n.o.s., (contains mercury), 9, NA3077, PGIII (D009)	X	001	CF	00065	K	
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00029	K	
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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: JOSEPH L. BARTHOLOMEW — Signature: Joseph L. Bartholomew — Month 1 Day 02 Year 1999

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: CHRIS GRAY — Signature: Chris Gray — Month 1 Day 02 Year 1999

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space: Item 13b Total Quantity 29K is a field estimate, Actual measured weight is 24K.LY

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Larry Young — Signature: Larry Young — Month 1 Day 02 Year 1999

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. I A D 0 0 0 2 2 2 6 5 3 — Manifest Document No. 108684

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FORT MADISON, IA

4. Generator's Phone (319) 463-2222 52627

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC

6. US EPA ID Number: I A D 0 0 0 0 1 0 9 3 2

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A D 0 0 0 0 1 0 9 3 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid , n.o.s., (contains mercury), 9, NA3077, PGIII (D0C9)	X					
b. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X					
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 309-754-4012.

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.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

991026-9395

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY ATTN: ACCTS PAYABLE PO BOX 172286 DENVER, CO 80217-2286	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH FORT MADISON IA 52627

SHIPPING 2428 OR P.O. #	10/26/99 DATE:	PICKUP		DELIVERED

QUANTITY	LAMP TYPE	DRUM
145	Fluorescent ≤ 4' and Compacts	DROP 4'(190) 1 4'(80) ___ 8' ___ Steel ___
28	Fluorescent > 4'	PICKUP 4'(190) 1 4'(80) ___ 8' ___ Steel ___
	Shielded Fluorescent, all lengths	NOTES:
	U Shape and Circular	[illegible] 1-8'
15	High Intensity Discharge	
Est: ___ Lbs	Crushed Fluorescent Lamps(Act ___ Lbs.)	
	Other ___	
188	◀ TOTAL UNITS RECEIVED	RECEIVED: AP DATE:
		PROCESSED: AP DATE:

QUANTITY PCB	QUANTITY Non PCB	BALLASTS	BATTERIES QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
		Ballasts (Fluorescent 4' & under)	30	[illegible]	5	
		Ballasts (Fluorescent over 4')				
4 est	4 est	Capacitors				
	8 est	Other Items: transformers		◀ TOTAL UNITS RECEIVED		
			NOTES:			
		◀ TOTAL UNITS RECEIVED				

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: [signature]
Date: 10-26-99 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

A-TEC RECYCLING INC.

LAND DISPOSAL RESTRICTION FORM

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 08684

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
D009	Low Hg High Hg	NWW	CIRCLE ONE YES NO YES NO YES NO	NLDBR "fb" RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Joseph L. Bartholomew Certify

Print Name: JOSEPH L. BARTHOLOMEW Date: 10-26-99

Printed on recycled paper

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described shipment of Mercury containing lamps was recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 15-Dec-99

Receiving
Number: 991209-9701

Items Received and Recycled

Quantity	Description
13	High Intensity Discharge (HID)
67	Fluorescent Greater than 4'
8	Ballasts - non PCB
0.4	Batteries - Alkaline (lbs)
0.2	Batteries - Lithium (lbs)
97	Fluorescent 4' and Under

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 172286
DENVER, CO 80217--2286

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE December 15, 1999

Please print or type. (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. IAD 000 222 653 — Manifest Document No. 08906 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FT MADISON, 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: IAO000010827

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: IAO000010827

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid , n.o.s., (contains mercury), 9, NA3077, PGIII (D009)	X	002	CF	0.0075	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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: X Joseph L. Bartholomew — Signature: X Joseph L. Bartholomew — Month Day Year: 1 12 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: CHRIS GRAY — Signature — Month Day Year: 1 12 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space Line B should read RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA waste code PCB-2) (NAERG-171), 001, DM, 00023, K, Respectively. LY

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lamy Young — Signature: Lamy Young — Month Day Year: 1 12 01 99

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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. I A 0 0 0 0 2 2 2 6 5 3 | Manifest Document No. 08906 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH PO BOX 220 FT MADISON, 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
I A 0 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number
I A 0 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone 515-244-7357

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, Solid , n.o.s., (contains mercury), 9, NA3077, PGIII (D009)	X	01	CF	00074	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 99NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-551-4912.

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

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 | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

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PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

991209-9701

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY ATTN ACCTS PAYABLE PO BOX 172286 DENVER, CO 80217-2286	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH FORT MADISON IA 52627

SHIPPING OR P.O. # FT2428 | DATE: 12/9/99 | PICKUP | DELIVERED

QUANTITY	LAMP TYPE
100 EST	Fluorescent ≤ 4' and Compacts
70 EST	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
10 EST	High Intensity Discharge
Est:_____ Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____
180 EST	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190) 1	4'(80)___	8' 1	Steel___
PICKUP	4'(190) 1	4'(80)___	8'___	Steel___

NOTES: FILLED 1-8'

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
	7	Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
1		Capacitors
	1	Other Items: transformer
		◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
2	LITHIUM	1	
2	ALKILINE	1	
4	◀ TOTAL UNITS RECEIVED		

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: Joseph L. [illegible]
Date: 12-9-99 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [illegible]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-697

A-TEC RECYCLING INC.

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

LAND DISPOSAL RESTRICTION FORM

GENERATOR NAME: CLIMAX MOLYBDENUM COMPANY

MANIFEST NUMER: 08906

EPA HAZARDOUS WASTE CODE	SUBCATEGORY	TREATABILITY GROUP NWW/WW	DOES WASTE MEET TREATMENT STANDARD 40 CFR 268.41	IF APPLICABLE 40 CFR 268.42 SPECIFIED TECHNOLOGY CODE
			CIRCLE ONE	
D009	Low Hg	NWW	YES NO	NLDBR
	High Hg		YES NO	"fb"
			YES NO	RMERC

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment. [268.7(a) (2) (D) (ii)]

I Joseph L. Bartholomew Certify

Print Name: Joseph L. Bartholomew Date: 12-8-99

Printed on recycled paper

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 19-Apr-00

Receiving
Number: 000411-10520

Items Received and Recycled

Quantity	Description
0.2	Batteries - Lithium (lbs)
2.9	Batteries - Alkaline (lbs)
1.1	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
17.4	Crushed Fluorescent Lamps (lbs)
62	High Intensity Discharge (HID)
158	Fluorescent 4' and Under
18	Ballasts - non PCB
57	Fluorescent Greater than 4'

Certificate issued to:
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. E. Floyd

DATE April 19, 2000

Please print or type. (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.

Manifest Document No. 109223

2. Page 1 of

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

3. Generator's Name and Mailing Address: Climax Molybdenum Company, 2598 Highway 61 South, Fort Madison, IA 52627

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: IA0000109827

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: A-TEC RECYCLING, INC., 5745 NE 17TH STREET, DES MOINES, IA 50313

10. US EPA ID Number: IA0000109827

G. State Facility's ID

H. Facility's Phone: 515-244-7357

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HM X RQ, Polychlorinated Biphenyls, 9, UN2315 PG II CEPA waste code PCB-2 (NAERG-171)	001	DM	00066	K	
b.						
c.						
d.						

Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED. EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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: X Joseph L. Bartholomew

Signature: X Joseph L. Bartholomew

Month Day Year: 04 11 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Richard D Douglas

Signature: Richard D Douglas

Month Day Year: 04 11 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space: Item 13b total Quatity 66 K is a field estimate, Actual measured weight is 54K.LY

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Larry Young

Signature: Larry Young

Month Day Year: 04 13 00

GENERATOR / TRANSPORTER / FACILITY

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

A-TEC RECYCLING INC.

BILL OF LADING

000411-10520

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
ATTN. ACCTS PAYABLE
PO BOX 220
FORT MADISON IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

SHIPPING OR P.O. #	DATE:		PICKUP		DELIVERED
FT2428	4/11/00	X			

QUANTITY	LAMP TYPE
170 ea	Fluorescent ≤ 4' and Compacts
60 ea	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
10 ea	High Intensity Discharge
Est: 23 Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____
290	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190) /	4'(80) ___	8' /	Steel ___
PICKUP	4'(190) /	4'(80) ___	8' /	Steel ___

NOTES:

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
2 ea		Ballasts (Fluorescent 4' & under)
5 ea		Ballasts (Fluorescent over 4')
20 ea		Capacitors
		Other Items: _____
		_____
		_____
27 ea		◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
	◀ TOTAL UNITS RECEIVED		

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: [signature]
Date: 4/11/00 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

Please print or type. (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.

Manifest Document No. 09223

2. Page 1 of

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

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Phone (319)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X				K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-551-4912.

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

GENERATOR COPY

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 27-Sep-00

Receiving
Number: 000922-11609

Items Received and Recycled

Quantity	Description
66.2	Computers - Other Components (lbs)
105.2	Computer (CRT) Monitors (lbs)
0.2	Batteries - Lithium (lbs)
8.6	Batteries - Alkaline (lbs)
26.2	Batteries - Lead Acid (lbs)
2.4	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
4	Non-PCB Capacitors
30	Ballasts - non PCB
37	Fluorescent Greater than 4'
63	High Intensity Discharge (HID)
116	Fluorescent 4' and Under

Certificate issued to:
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE September 27, 2000

Please print or type. (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.

Manifest Document No. 109445

2. Page 1 of

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

3. Generator's Name and Mailing Address: Clinton Molybdenum Company, 2598 Highway 61 South, Fort Madison IA.

4. Generator's Phone (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: IA0000109827

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: IA0000109827

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	68K		
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED. EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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.

GENERATOR

Printed/Typed Name: X Joseph L. Bartholomew

Signature: X Joseph L. Bartholomew

Month Day Year: 09 12 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Richard Douglas

Signature: Richard Douglas

Month Day Year: 09 12 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

FACILITY

19. Discrepancy Indication Space: Item 13A total quantity 68K a field estimate, actual measured weight is 61K. CN

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Curt Neumann

Signature: Curt Neumann

Month Day Year: 09 25 00

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.

Manifest Document No. 109445

2. Page 1 of

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

GENERATOR

Generator's Name and Mailing Address

4. Generator's Phone (3 9)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ,Polychlorinated Biphenyls,9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X					
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-351-4812

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

Style F15 Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

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PRINTED WITH SOY INK

GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

000922-11609

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY ATTN: ACCTS PAYABLE PO BOX 220 FORT MADISON, IA 52627	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 81 SOUTH FORT MADISON, IA 52627

SHIPPING OR P.O. # F12428 | DATE: 9/22/00 | ✓ PICKUP | DELIVERED

QUANTITY	LAMP TYPE
112 Est	Fluorescent ≤ 4' and Compacts
20 Est	Fluorescent > 4'
	All Shielded Fluorescent
	U Shape and Circular
40 Est	High Intensity Discharge
Est:_____Lbs	Crushed Lamps (Act_____Lbs.)
	Other_____
TOTAL UNITS	NOTES
172 Est	

DRUM

DROP	4'(190) 1	4'(80)_____	8' 1	Steel 1
PICKUP	4'(190) 1	4'(80)_____	8' 1	Steel 1
RECEIVED		A P	DATE	
PROCESSED		A P	DATE	

COMPUTERS

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Non Lbs	100	
	Machines	30	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
3	6 Est	Ballasts (Fluorescent 4' & under)
3	3 Est	Ballasts (Fluorescent over 4')
		HID Ballasts
30 Est	15	Capacitors
		Other Items _____
TOTAL UNITS		NOTES

BATTERIES

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Assorted	30	
	TOTAL UNITS RECEIVED		

NOTES

RECEIVED, subject to the classification and regulations in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/ballasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: [signature]
Date: [illegible] EPA#: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

No. 3155-6

Date: 11/9/00

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2589 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number WIK105113 **Received by us on** 10/19/00

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-0

Barbara J. Kerkin /EOG

Authorized Signature

EE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE.

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

Form Approved. OMB No. 2050-0039.

...m designed for use on elite (12-pitch) typewriter.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 5113
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Climax Molybdenum, 2598 Hwy 61
Site Location If Different:
4. Generator's Phone (319)463-2224 Ft. Madison IA 52627

A. State Manifest Document Number: WIK 105113
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone (940)479-2033
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone (414) 353-1156

5. Transporter 1 Company Name: System Logistics
6. US EPA ID Number: TXR000030593
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address: EOG Disposal, Inc., 5611 W. Hemlock Street, Milwaukee, WI 53223
10. US EPA ID Number: WID988580056

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Acetone, 3, UN1090, PG-II	01	DM	40	G	D001
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above: 3155-D-19991164 Spent Acetone (EOG [illegible])
K. Handling Codes for Wastes Listed Above: [illegible]

15. Special Handling Instructions and Additional Information:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title: Shelly Heston Env Mgr
Signature: Shelly Heston
Date: Month 10 Day 18 Year 2000

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title: Earl Ahlers
Signature: [signature]
Date: Month 10 Day 18 Year 2000

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title
Signature
Date: 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 & Position Title: Martin W. Schmit Plant Mngr
Signature: Martin W. Schmit
Date: Month 10 Day 19 Year 2000

...PA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Gen...
6 — Transporter retain

Copies 1 & 3 mail to Wis. DNR at above address

...mergency 24 Hour Assistance

...S INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

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. T A D 0 0 0 2 2 2 6 5 3	Manifest Document No. 5 0 1 8 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
4. Generator's Phone (319)463-2224 Ft. Madison, IA 52627

Site Location If Different

A. State Manifest Document Number WI K 105113
B. State Generator's ID

5. Transporter 1 Company Name
System Logistics

6. US EPA ID Number T X R 0 0 0 0 3 0 5 9 3

C. State Transporter's ID
D. Transporter's Phone (940)479-2033

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
EOG Disposal, Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223

10. US EPA ID Number W I D 9 8 9 5 8 0 0 5 6

G. State Facility's ID
H. Facility's Phone (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Acetone, 3, UN1090, PG-II	01	DM	40	G	D 0 0 1
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
A. [redacted]155-0;19991164;Spent Acetone;(ERG#127)
B.
D.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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.

GENERATOR

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Shelly Heston Env Mgr	Shelly Heston	10/18/2001

TRANSPORTER

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Earl Ahlers		10/18/2001

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

FACILITY

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 & Position Title	Signature	Date (Month Day Year)

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
Copies 1 & 3 mail to Wis. DNR at above address.
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain

Emergency 24 Hour Assistance and Spill Reporting Telephone Number: (800) 943-0003

COPY 2- GENERATOR RETAIN

EOG Disposal, Inc.
WID988580056
5611 W. Hemlock St.
Milwaukee, WI 53223
414/353-1156 FAX: 414/353-1822

Generator Name: Climax Molybdenum

EPA ID#: IAD000222653

Manifest Number: WI K105113

Hazardous Waste Restricted from Land Disposal Certification

Line item A (A, B, C or D) is subject to the land disposal restrictions of 40CFR Part 268. In accordance with 40CFR 268.7, this generator is providing notice that the waste does not meet the treatment standards specified in Part 268 Subpart D, or does not meet the prohibitions specified in 268.32 or RCRA section 3004 (d).

_____ The shipment contains F001 - F005 spent solvents (Complete Table A, page 2)

X The shipment contains other Land Disposal Restricted materials. List all US EPA hazardous waste codes that apply to this waste shipment. (Complete Table B, page 3) (D001 CMBST)

_____ The shipment contains F039 multi-source leachate, or D001 (DEACT), D002 (DEACT) waste prohibited under 40 CFR Section 268.37 or D012 through D043 waste prohibited under the revision to 40 CFR Section 268.48. (Complete Table B, page 3 and/or Table C, page 4)

_____ The shipment contains labpacks (Complete Table D, page 6)

Waste Management. Using the following guidelines based on 40CFR 268.7, enter the appropriate letter in the "Management" column located on Table B.

A. RESTRICTED WASTE REQUIRING FURTHER TREATMENT. This waste must be treated in the applicable treatment standards set forth in 40CFR part 266 subpart D, 268.32, or RCRA Section 3004(d). For "Hazardous Debris", this hazardous debris is subject to the alternative treatment standards of 40CFR 268.45.

B. RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS. " I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40CFR 268 subpart D, and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS A SPECIFIED TECHNOLOGY AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY. " I certify under penalty of law that the waste has been treated in accordance with the requirements of 40CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D. GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the non wastewater organic constituents have been treated by incineration in units operated in accordance with 40CFR Part 264 Subpart O or 40CFR Part 265 Subpart D or by combustion in fuel substitution units in accordance with applicable technical requirements, and I have been unable to detect the non-wastewater organic constituents despite having used good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

E. RESTRICTED WASTE SUBJECT TO A VARIANCE. This waste is subject to a national capacity variance, a treatable varianc or a case - by - case extension. Enter the effective date of the prohibition in this column as well. For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40CFR Part 265.45."

F. RESTRICTED WASTE WHICH CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT. " I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32, or RCRA Section 3004(d), and therefore can be land disposed without further treatment." A

...y of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. " I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40CFR Part 268 subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification including the possibility of a fine and imprisonment."

G. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS. This waste is a newly identified waste that is not currently subject to any 40CFR 265 restrictions.

TABLE A

Treatment Standards for F001 - F005 Spent Solvents

Waste Code	Constituents of Concern	Non-Wastewater	
		Total compostion mg/kg	TCLP mg/L
F001 ☐	Carbon Tetrachloride	6	-
F001 ☐	Methylene Chloride	30	-
F001 ☐	Tetrachloroethylene	6	-
F001 ☐	1,1,1-Trichloroethane	6	-
F001 ☐	Trichloroethylene	6	-
F001 ☐	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F001 ☐	Trichloromonofluoromethane	30	-
F[illegible] ☐	Chlorobenzene	6	-
F002 ☐	o-dichlorobenzene	6	-
F002 ☐	Methylene Chloride	30	-
F002 ☐	Methylene Chloride (Pharmaceutical Industry)	-	-
F002 ☐	Tetrachloroethylene	6	-
F002 ☐	1,1,-Trichloroethane	6	-
F002 ☐	1,1,2-Trichloroethane	6	-
F002 ☐	Trichloroethylene	6	-
F002 ☐	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F002 ☐	Trichloromonofluoromethane	30	-

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F003 ☐	Acetone	160	-
F003 ☐	n-Butyl Alcohol	2.6	-
F003 ☐	Cyclohexanone		0.75
F003 ☐	Ethyl Acetate	33	-
F003 ☐	Ethyl Benzene	10	-
F003 ☐	Ethyl Ether	160	-
F003 ☐	Methanol		0.75
F003 ☐	Methyl Isobutyl Ketone	33	
F003 ☐	Xylenes (total)	30	-
F004 ☐	Cresol	5.6	-
F004 ☐	Nitrobenzene	14	-
F005 ☐	Benzene	10	-
F005 ☐	Carbon Disulfide		4.8
F005 ☐	2-Ethoxyethanol	INCIN	
F005 ☐	Isobutyl Alcohol	170	
F005 ☐	Methyl Ethyl Ketone	36	
F005 ☐	2-Nitropropane	INCIN	
F005 ☐	Pyridine	16	
F005 ☐	Toluene	10	

TABLE B

Waste Code	Non-waste water	Treatment Sub-category (if applicable, or NONE)	Technology Standards or Management (A-G based on list shown on pages 1/2)
☐ D001		Ignitable Liquids based on 40 CFR 261.21 except for the 261.21 (a)(1) High TOC Subcategory, managed in Non-CWA/Non CWA equivalent, non Class 1 SDWA Systems	DEACT & meet UTSD, or RORGS, or CMBST
☐ D001		Ignitable characteristic wastes, except for the 261.21 (a)(1) High TOC Subcategory, that are managed in CWA/CWA-equivalent Class 1 SDWA Systems.	DEACT
● D001	NWW	Ignitable liquids based on 40 CFR 261.2 (a)(1) High TOC Ignitable Liquid Subcategory - greater than or equal to 10% TOC	RORGS or CMBST A

If D001, D002, or D012 through D043 requires treatment to 268.40 standards, then each underlying hazardous constituent present in the waste at the point of generation and at a level above the UTS constituents listed treatment standard must be checked.

If D001 or D002 requires treatment of deactivation and meets F039 standards then each underlying hazardous constituent present in the waste at the point of generation and at a level above the F039 and UTS constituent listed treatment standard must be checked.

IF THERE ARE NO UTS CONSTITUENTS PRESENT IN THE WASTE UPON IT'S INITIAL GENERATION CHECK HERE ☐

Check the underlying individual constituents likely to be present from the list below:

	Regulated Constituent	WW	NWW
	Acenaphthylene	0.059	3.4
	acenaphthene	0.059	3.4
	Acetone	0.28	160
	Acetonitrile	5.6	1.8[2]
	Acetophenone	0.010	9.7
	2-Acetylaminofluorene	0.059	140
	Acrolein	0.29	NA
	Acrylamide	19[2]	23[2]
	Acrylonitrile	0.24	84
	Aldrin	0.021	0.066
	4-Aminobiphenyl	0.13	NA
	Aniline	0.81	14
	Anthracene	0.059	3.4
	Aramite	0.36	NA
	alpha-BHC	0.00014	0.066
	beta-BHC	0.00014	0.066
	delta-BHC	0.023	0.066
	gamma-BHC (Lindane)	0.00017	0.066
	Benzene	0.14	10
	Benz (a) anthracene	0.059	3.4
	Benzal chloride	0.055[2]	60[2]
	Benzo (b) fluoranthene	0.11	68
	Benzo (k) fluoranthene	0.11	68
	Benzo (g,h,i,) perylene	0.0055	18
	Benzo (a) pyrene	0.061	34
	Bromodichloromethane	0.35	15
	Bromoform (Tribromomethane)	0.63	15
	Bromomethane (methyl bromide)	0.11	15
	4-Bromophenyl phenyl ether	0.0055	15
	n-Butanol (n-butyl alcohol)	5.6	2.6
	Butyl benzyl phthalate	0.017	28
	2-sec Butyl 4.6 dinitrophenol (Dinoseb)	0.066	2.5
	Carbon Disulfide	3.8	1.8[1,2]
	Carbon Tetrachloride	0.057	6.0
	o-Dichlorobenzene	0.088	6.0
	p-Dichlorobenzene	0.090	6.0
	Dichlorodifluoromethane	0.23	7.2
	1,1-Dichloroethane	0.59	6.0
	1,2-Dichloroethane	0.21	6.0
	1,1-Dichloroethylene	0.025	6.0
	trans-1,2-Dichloroethylene	0.054	30
	2,4-Dichlorophenol	0.044	14
	2,6-Dichlorophenol	0.044	14
	1,2-Dichloropropane	0.85	18
	cis-1,3-Cichloropropylene	0.036	18
	trans-1,3-Dichloropropylene	0.036	18
	Dieldrin	0.017	0.13
	Diethyl phthalate	0.20	28
	p-Dimethylaminoazobenzene	0.13	NA
	2,4-Dimethyl Phenol	0.036	14
	Dimethyl Phthalate	0.047	28
	Di-n-butyl Phthalate	0.057	28
	1,4-Dinitrobenzene	0.32	2.3
	4,6-Dinitro-o-cresol	0.28	160

	Regulated Constituent	WW	NWW
	chlordane (alpha & gamma)	0.0033	0.26
	p-Chloroaniline	0.46	16
	Chlorobenzene	0.057	6.0
	Chlorobenzilate	0.10	NA
	2-chloro-1,3 butadiene	0.057	0.28[2]
	Chlorodibromomethane	0.27	15
	Chloroethane	0.036	6.0
	bis-(2-Chloroethoxy) methane	0.033	7.2
	bis-(2-Chloroethyl) ether	0.033	6.0
	Chloroform	0.046	6.0
	bis-(2-Chloroisopropyl) ether	0.055	6.0
	p-Chloro-m-cresol	0.018	14
	2-Chloroethyl Vinyl ether	0.062[2]	NA[2]
	Chloromethane (methyl chloride)	0.19	30
	2-Chloronaphthalene	0.055	5.6
	2-Chlorophenol	0.044	5.7
	3-Chloropropylene	0.036	30
	Chrysene	0.059	3.4
	o-Cresol	0.11	5.6
	Cresol (m- and p- isomers)	0.77	5.6
	Cyclohexanone	0.36	0.75[2]
	1,2-Dibromo-3-Chloropropane	0.11	15
	1,2-Dibromoethane (Ethylene dibromide)	0.028	15
	Dibromomethane	0.11	15
	2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
	o,p,DDD	0.023	0.087
	p,p-DDD	0.023	0.087
	o,p-DDE	0.031	0.087
	p,p-DDE	0.031	0.087
	o,p-DDT	0.0039	0.087
	p,p-DDT	0.0039	0.087
	Dibenz (a,h) anthracene	0.055	8.2
	Dibenz (a,e) pyrene	0.061	NA
	m-Dichlorobenzene	0.036	6.0
	Fluoranthene	0.068	3.4
	Fluorene	0.059	3.4
	Heptachlor	0.0012	0.066
	Heptachlor epoxide	0.016	0.066
	Hexachlorobenzene	0.055	10
	Hexachlorobutadiene	0.055	5.6
	Hexachlorocyclopentadiene	0.057	2.4
	Hexachlorodibenzo-furans	0.000063	0.001
	Hexachlorodibenzo-p-dioxins	0.000063	0.001
	Hexachloroethane	0.055	30
	Hexachloropropylene	0.035	30
	Indeno (1,2,3-c,d) pyrene	0.0055	3.4
	Iodomethane	0.19	65
	Isobutanol (Isobutyl Alcohol)	5.6	170
	Isodrin	0.021	0.066
	Isosafrole	0.081	2.6
	Kepone	0.0011	0.13
	Methacrylonitrile	0.24	84
	Methanol	5.6	0.75[1,2]
	Methapyrilene	0.081	1.5

Regulated Constituent	WW	NWW
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propynitrosoamine	0.40	14
1,4-Dioxane	NA	170
Diphenylamine [4]	0.92	13[3]
Diphenyinitrosoamine [4]	0.92	13[3]
1,2-Diphenyl hydrazine	0.087	NA
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160
bis-(2-Ethylhexyl) phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
PCB's (Total all isomers or Aroclors)	0.10	10
Pentachlorobenzene	0.55	10
Pentachloroethane	0.55[5]	6.0[5]
Pentachlorodibenzo-furans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
Phorate	0.021	4.6
Phthalic acid	0.55[5]	28[3]
Phthalic anhydride	0.055	28[3]
Pronamide	0.93	15
Pyrene	0.067	82
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	79
2,4,5-T	0.72	79
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzo-furans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.80	10
Toxaphene	0.0095	2.6

Regulated Constituent	WW	NWW
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene-bis-(2-chloroaniline)	0.50	30
Methylene chloride	0.089	30
Methyl Ethyl Ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methanesulfonate	0.018	NA
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27[5]	14[3]
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028[5]	13[3]
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3[3]
N-Nitroso-di-n-butylamine	0.40	17
N-Nitrosomethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
1,2,4-Trichlorobenzene	0.55	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
Tris-(2,3-dibromopropyl)phosphate	0.11	0.10[3]
Vinyl chloride	0.27	6.0
Xylene (sum of o-, m-, and p-isomers)	0.32	30
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30[1]
Arsenic	1.4	5.0[1]
Barium	1.2	7.6[1]
Beryllium	0.82	0.014[1,2]
Cadmium	0.69	0.19[1]
Chromium (Total)	2.77	0.86[1]
Fluoride	35	NA
Lead	0.69	0.37[1]
Mercury (Not from Retorting)	0.15	0.025[1]
Antimony	1.9	2.1[1]
Nickel	3.98	5.0[1]
Selenium	0.82	0.16[1]
Silver	0.43	0.30[1]
Sulfide	14	NA
Thallium	1.4	0.078[1,2]
Vanadium	4.3	0.23[1,2]
Zinc	2.61[3]	NA

These concentrations are expressed in mg/L and are measured through an analysis of TCLP extract; all others are measured through a total waste analysis.

These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.

Zinc is not an Underlying Hazardous Constituent requiring treatment in D001, D002, or D012-D043 wastes.

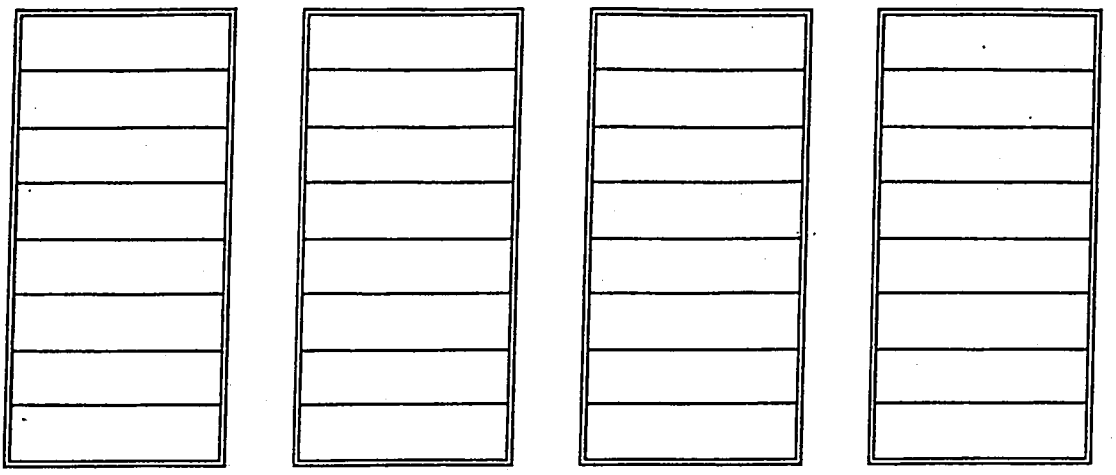
These compounds are regulated by the sum of their concentration instead of as individual constituents.

NOTE: Wastewater units are in mg/L, non-wastewater are in mg/Kg.

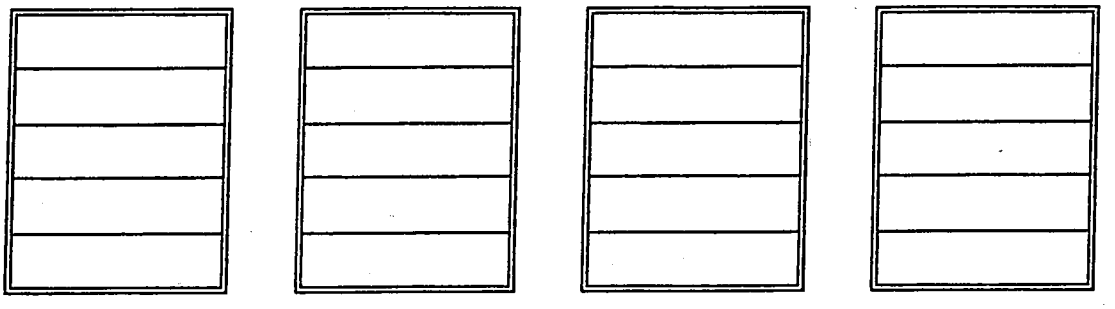
TABLE D
LAB PACK CERTIFICATION

(268.42, Appendix iv)

1. APPENDIX IV DRUMS:
This notification and certification applies to the following drums on this shipment. List the Lab Pack drum identification numbers below:



2. ALL DRUMS THAT MAY NOT BE PACKAGED AS APPENDIX IV TYPE LABPACKS:
The US EPA Hazardous waste codes are **D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.** The alternative treatment standard is incineration (INCIN). This notification applies to those wastes in the following drums on this shipment. List the Lab Pack drum identification numbers below:



CERTIFICATION:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

I hereby certify that all information in this and all associated documents is complete and accurate to the best of my knowledge and information has all the necessary permits and licenses for the waste that has been identified by the profile, if approved for management.

Authorized Representative Signature: x Shelly Huston

Print or Type Name: x Shelly Huston

Title: x Env Mgr **Date:** x 10/18/2000

I:\USER\FORMS\BLANKS\LAND_BAN.4

EOG

5611 West Hemlock Street • Milwaukee, WI 53223

(414) 353-1156 • Fax (414) 353-1822

(800) 234-1156

EOG Environmental, Inc.

October 12, 2000

Lori Seabold
HEI Consultants
P.O. Box 1472
Keokuk, IA 52632

RE: Recertification

Dear Lori:

Ref: Climax Molybdenum

WS# 3155-0 Date of Original Profile: 9/15/99
Name: Spent Acetone

EOG Disposal, Inc. is committed to the need of our customers and to the regulatory agencies under which we operate. The EOG Disposal Plan of Operation requires that we recertify each of our customers waste streams on an annual basis.

Please review and sign the attached "Waste Profile Sheet" and return to us. The Wisconsin DNR requires us to have an original signature on file. If we do not receive a response within thirty (30) days of the date of this letter, we will also consider this waste stream to have expired.

YES, I would like to renew this profile(s) for another year.

Per 40 CFR 265.13, the characteristics of this waste(s) have not changed. I also certify that I am an employee of the generator and I am authorized to sign this recertification.

X Shelly R Heston
Signature

X Environmental Manager
Title

X 10/17/2000
Date

NO, I do not wish to renew this profile(s) for one more year.

I also certify that I am an employee of the generator, and I am authorized to sign this waste stream cancellation.

X _____
Signature

X _____
Title

X _____
Date

Thank you for your cooperation. If you have any questions, please contact your sales representative or call me at 1-800-234-1156.

Sincerely,

EOG ENVIRONMENTAL, INC.
EOG DISPOSAL, INC.

Ron Mitchell

Ron Mitchell
Approval Coordinator

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5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223
(414) 353-1156 1-800-234-1156
WID988580056

EOG Environmental, Inc.

WS Number: 3155-0

SECTION A - GENERAL INFORMATION

Generator Name:	Climax Molybdenum	#	3155	Bill to:	Lori Seabold
Address:	2589 Hwy 61	SIC #:			HEI Consultants
City, State, Zip:	Ft. Madison IA 52627				P.O. Box 1472
Contact:	Shelly Heston				Keokuk IA 52632
Telephone:	(319) 463-2234 Ext. 0000	FAX #:	(319) 463-7159 Ext		
EPA ID:	IAD000222653	This profile sheet was completed using:			Generator Knowledge

SECTION B - WASTE DESCRIPTION AND GENERAL CHARACTERISTICS

Name of Waste: Spent Acetone

Process Generating Waste: Lab testing

Color: Clear Odor: Solvent , Mild WB Layer: Single Free Phases:

Consistency Liquid: 100 % Powder: % Solid: % Sludge: % Approval # 19991164

SECTION C - RCRA AND DOT INFORMATION

IS THIS A USEPA HAZARDOUS WASTE? Y IS THIS A DOT HAZARDOUS MATERIAL? Y Anticipated Annual Volume: 55-110 Units: gal

USEPA HAZARDOUS WASTE CODES: D001,

Proper Shipping Name: RQ Waste Acetone

Hazard Class: 3 ID #: UN1090 PG No: II Additional Description:

CERCLA Reportable Quantity (RQ): 100 Volume on hand: 1x55 Shipment Method: Drum Drum Size/Type: 0/ DM

SECTION D - SPECIAL HANDLING INSTRUCTIONS

Treatment Method Fuel Blending

Special Handling: Proper PPE Required

Is a sample provided? N

SECTION E - METALS

This waste contains the following metals based on Generator Knowledge

METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL
Arsenic:	<5	Mercury:	<0.2	Nickel:	<5
Barium:	<100	Selenium:	<1	Thalium:	<5
Cadmium:	<1	Silver:	<5	Zinc:	<5
Chromium:	<5	Chromium-Hex:	<5		
Lead:	<5	Copper:	<5	ALL are (parts per million)	

SECTION F - PHYSICAL/CHEMICAL PROPERTIES

	EST.	Actual:		EST.	Actual:
Specific Gravity:	0.8 - 1.0		BTU:	8-12	
Total Suspended Solids:	<0.5		Flash Point Degrees F.:	73-140	
pH:	6-8		Sulfur (%WT):	<0.5	

SECTION G - HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS

Reactivity: None Treatment Method: Fuel Blending

Viscosity: Low Are TC Codes Present? (If yes, see USEPA Codes.)

Halogens (ppm's) Chlorine: 0 Bromine: 0 Fluorine: 0 Iodine: 0

Cyanides (ppm's): 0 PCB'S (ppm's): 0 Pesticides: 0 Sulfides (ppm's): 0 Phenolics 0

SECTION H - CHEMICAL COMPOSITION (must total 100%)

acetone	90	%		%		%	
mineral oil	0-2	%		%		%	
isobutyl alcohol	0-2	%		%		%	
methyl isobutyl alcohol	0-2	%		%		%	
ethyl alcohol	0-2	%		%		%	
molybdenum	0-2	%		%		%	
		%		%			

I hereby certify that all information submitted in this and all attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc., as Generator's agent for disposal of waste. Accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master sheet" above. In this respect, EOG Environmental, Inc., in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

Shelly Heston Environmental Mgr X 10/17/00

SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 17-Jan-01

Receiving
Number: 010111-12215

Items Received and Recycled

Quantity	Description
34	Ballasts - non PCB
65	Fluorescent Greater than 4'
52	High Intensity Discharge (HID)
78	Fluorescent 4' and Under
34.6	Computers - Other Components (lbs)
4.6	Computer (CRT) Monitors (lbs)
0.2	Batteries - Lithium (lbs)
6.8	Batteries - Alkaline (lbs)
0.7	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
11	Non-PCB Capacitors

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY P. E. Floyd

DATE January 17, 2001

Please print or type. (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. IAD010226530 Manifest Document No. 109604

2. Page 1 of

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

GENERATOR

Generator's Name and Mailing Address: Climax MolyBdenum Co. 2598 Highway 61 S Fort Madison, IA.

A. State Manifest Document Number

B. State Generator's ID

4. Generator's Phone (319) 463-2222

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.**

6. US EPA ID Number: IA0000109827

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: IA0000109827

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00041	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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	Signature	Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	04	17	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
T. Edwards		04	17	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space: Item 13A Total Quantity is a field estimate, actual measured weight is 37.5K. CW

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
CURT DEUMANN	Curt Deumann	04	15	01

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ORIGINAL-RETURN TO GENERATOR

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Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. [illegible] Manifest Document No. 109604

2. Page 1 of

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

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	[illegible]	[illegible]	[illegible]	K	
b.						
c.						
d.						

Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO SGNAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-551-4912.

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

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GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

010111-12215

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON IA 52627

SHIPPING OR P.O. #T2428	DATE 11/01	✓ PICKUP	DELIVERED

QUANTITY	LAMP TYPE
100 ST	Fluorescent ≤ 4' and Compacts
100 ST	Fluorescent > 4'
	All Shielded Fluorescent
	U Shape and Circular
100 ST	High Intensity Discharge
Est:_____Lbs	Crushed Lamps (Act_____Lbs.)
	Other_____
TOTAL UNITS	NOTES

DRUM				
DROP	4'(190)_____	4'(80)_____	8'_____	Steel_____
PICKUP	4'(190)_____	4'(80)_____	8'_____	Steel_____
RECEIVED	A P	DATE		
PROCESSED	A P	DATE		

COMPUTERS

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Flatbeds	30	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
3		Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
		HID Ballasts
30	11	Capacitors
		Other Items 34 Transformers
TOTAL UNITS		NOTES

BATTERIES

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Alkaline	3	
	Carbon Zinc	3	
	Nicad	1	
	TOTAL UNITS RECEIVED		

NOTES

RECEIVED, subject to the classification and regulations in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

I certify to certify that the above described lamps/ballasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: [signature]
Date: 11/01 EPA#: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 4-Apr-01

Receiving
Number: 010329-12729

Items Received and Recycled

Quantity	Description
32	Computers - Other Components (lbs)
2.9	Batteries - Alkaline (lbs)
6	Batteries - Lead Acid (lbs)
29	Non-PCB Capacitors
37	Ballasts - non PCB
8	Fluorescent Greater than 4'
164	High Intensity Discharge (HID)
46	Fluorescent 4' and Under

Certificate issued to:
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE April 4, 2001

Please print or type. (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. | Manifest Document No. 109725 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: Climax Molybdenum Co. 2958 Hwy 61 S Ft. Madison IA 52627

A. State Manifest Document Number

B. State Generator's ID

4. Generator's Phone (319) 463-2222

5. Transporter 1 Company Name: A-TEC RECYCLING, INC. | 6. US EPA ID Number: IA0000109827 | C. State Transporter's ID | D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | F. Transporter's Phone

9. Designated Facility Name and Site Address: A-TEC RECYCLING, INC. 5745 NE 17TH STREET DES MOINES, IA 50313 | 10. US EPA ID Number: IA0000109827 | G. State Facility's ID | H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00173	K	
b.						
c.						
d.						

Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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: X Joseph L. Bartholomew | Signature: X Joseph L. Bartholomew | Month Day Year: 03 29 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Biff Moore | Signature | Month Day Year: 03 29 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space: Item 13A Total Quantity 173K is a field estimate, actual measured weight is 34K. CN.

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Curt Neumann | Signature: Curt Neumann | Month Day Year: 04 02 01

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.

Manifest Document No. 109725

2. Page 1 of 1

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

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: IA0000109827

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: IA0000109827

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ,Polychlorinated Biphenyls,9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)						
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-551-4912.

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 | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

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GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

010329-12729

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
ATTN. ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH

FORT MADISON, IA 52627

SHIPPING OR P.O. #	DATE:	PICKUP		DELIVERED
FT2428	3/29/01		✓	

QUANTITY	LAMP TYPE
416	Fluorescent ≤ 4' and Compacts
8	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
120	High Intensity Discharge
Est:_____ Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____

◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190)__	4'(80)__	8'__	Steel__
PICKUP	4'(190)__	4'(80)__	8'__	Steel__

NOTES:

RECEIVED:	AP	DATE:	
PROCESSED:	AP	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
	15	Ballasts (Fluorescent 4' & under)
	12	Ballasts (Fluorescent over 4')
	50	Capacitors
		Other Items: _____
		_____
	50	_____

◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)

◀ TOTAL UNITS RECEIVED

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: _____
Date: _____ EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: _____

No. 3155-9

Date: 8/13/01

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2598 Hwy 61. Ft. Madison, IA 52627*

Per your Manifest Number WIK105198 **Received by us on** 7/12/01

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-4

Susan Ingram

Authorized Signature

CLIMAX MOLYBDENUM COMPANY
A subsidiary of phelps dodge Corporation

Climax Molybdenum Company
P.O. Box 220
Fort Madison, Iowa 52627
(319) 463-7151

July 11, 2001 01ENV-050

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

Subject: State of Wisconsin Manifest #WIK105198

Dear Sir:

Enclosed is your copy of the above mentioned subject.

If you have any questions please contact me at (319) 463-2224.

Sincerely,

Shelly Heston
Environmental Manager

SRB
Enclosure

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

F[illegible] 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.: I A D 0 0 0 2 2 2 6 5 3
Manifest Document No.: 5 1 9 8
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
Site Location If Different

A. State Manifest Document Number: WI K 105198

4. Generator's Phone (319)463-2224 Ft Madison IA 52627

B. State Generator's ID

5. Transporter 1 Company Name: System Logistics
6. US EPA ID Number: T X R 0 0 0 0 3 0 5 9 3
C. State Transporter's ID
D. Transporter's Phone (940)479-2033

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
EOG Disposal, Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223
10. US EPA ID Number: W I D 9 8 8 5 8 0 0 5 6
G. State Facility's ID
H. Facility's Phone (414) 353-1156

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Paint related material,. (Contains TOLUENE and XYLENE).(D001 D008 F003 F005) 3, UN1263 PG-II	01	DM	55	G	D D D 1
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
3155-4,App # 2001494,Leaded Paint W/Solvent(ERG#128)
B: D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474. 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title: Shelly Heston Env. Manager
Signature: Shelly Heston
Date: Month 07 Day 11 Year 2001

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title: Larry Barbour
Signature: [illegible]
Date: Month [illegible] Day [illegible] Year [illegible]

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title
Signature
Date: 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 & Position Title: Martin W. Schmit Plant Mngr
Signature: Martin W. Schmit
Date: Month 07 Day 12 Year 2001

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain

Copies 1 & 3 mail to Wis. DNR at above address.

Emergency 24 Hour Assistance and Spill Reporting
Telephone Number: (800) 943-0003

COPY 5-
FACILITY SEND TO GENERATOR

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

Form Approved. OMB No. 2050-0039.

Designed for use on elite (12-pitch) typewriter.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. I A D 0 0 0 2 2 2 6 5 3	Manifest Document No. 5 1 1 9 8	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
Ft. Madison, IA 52627

Site Location If Different

4. Generator's Phone (319) 463-2224

A. State Manifest Document Number: WI K 105198
B. State Generator's ID:

5. Transporter 1 Company Name: System Logistics
6. US EPA ID Number: T X R 0 0 0 0 3 0 5 9 3
C. State Transporter's ID:
D. Transporter's Phone: (940) 479-2033

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
EOG Disposal, Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223

10. US EPA ID Number: W I D 9 8 8 5 8 0 0 5 6
G. State Facility's ID:
H. Facility's Phone: (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Paint related material,, (Contains TOLUENE and XYLENE),(D001,D008,F003,F005), 3, UN1263 PG-II	01	DM	55	G	D001
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
3155-4,App # 2001494,Leaded Paint W/Solvent(ERG#128)
B:
D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title	Signature	Date (Month Day Year)
Shelly Huston Env. Manager	Shelly Huston	07/11/2001

TRANSPORTER

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name & Position Title: Larry Barbour	Signature: Larry Barbour	Date: 7/11/2001
18. TRANSPORTER 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name & Position Title	Signature	Date

FACILITY

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 & Position Title	Signature	Date (Month Day Year)

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain
Copies 1 & 3 mail to Wis. DNR at above address.

Emergency 24 Hour Assistance and Spill Reporting
Telephone Number: (800) 943-0003

COPY 2-
GENERATOR RETAIN

EOG Disposal, Inc.
WID988580056
5611 W. Hemlock St.
Milwaukee, WI 53223
414/353-1156 FAX: 414/353-1822

Generator Name: Climax Molybdenum

EPA ID#: IAD000222653

Manifest Number: WI K105198

Hazardous Waste Restricted from Land Disposal Certification

Line item A (A, B, C or D) is subject to the land disposal restrictions of 40CFR Part 268. In accordance with 40CFR 268.7, this generator is providing notice that the waste does not meet the treatment standards specified in Part 268 Subpart D, or does not meet the prohibitions specified in 268.32 or RCRA section 3004 (d).

X The shipment contains F001 - F005 spent solvents (Complete Table A, page 2)

X The shipment contains other Land Disposal Restricted materials. List all US EPA hazardous waste codes that apply to this waste shipment. (Complete Table B, page 3) (D001 CMBST)

_____ The shipment contains F039 multi-source leachate, or D001 (DEACT), D002 (DEACT) waste prohibited under 40 CFR Section 268.37 or D012 through D043 waste prohibited under the revision to 40 CFR Section 268.48. (Complete Table B, page 3 and/or Table C, page 4)

_____ The shipment contains labpacks (Complete Table D, page 6)

Waste Management. Using the following guidelines based on 40CFR 268.7, enter the appropriate letter in the "Management" column located on Table B.

A. RESTRICTED WASTE REQUIRING FURTHER TREATMENT. This waste must be treated in the applicable treatment standards set forth in 40CFR part 266 subpart D, 268.32, or RCRA Section 3004(d). For "Hazardous Debris", this hazardous debris is subject to the alternative treatment standards of 40CFR 268.45.

B. RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS. " I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40CFR 268 subpart D, and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS A SPECIFIED TECHNOLOGY AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY. " I certify under penalty of law that the waste has been treated in accordance with the requirements of 40CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D. GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the non wastewater organic constituents have been treated by incineration in units operated in accordance with 40CFR Part 264 Subpart O or 40CFR Part 265 Subpart D or by combustion in fuel substitution units in accordance with applicable technical requirements, and I have been unable to detect the non-wastewater organic constituents despite having used good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

E. RESTRICTED WASTE SUBJECT TO A VARIANCE. This waste is subject to a national capacity variance, a treatable varianc or a case - by - case extension. Enter the effective date of the prohibition in this column as well. For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40CFR Part 265.45."

F. RESTRICTED WASTE WHICH CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT. " I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32, or RCRA Section 3004(d), and therefore can be land disposed without further treatment." A

copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. " I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40CFR Part 268 subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification including the possibility of a fine and imprisonment."

G. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS. This waste is a newly identified waste that is not currently subject to any 40CFR 265 restrictions.

TABLE A

Treatment Standards for F001 - F005 Spent Solvents

Waste Code	Constituents of Concern	Non-Wastewater	
		Total compostion mg/kg	TCLP mg/L
F001 □	Carbon Tetrachloride	6	-
F001 □	Methylene Chloride	30	-
F001 □	Tetrachloroethylene	6	-
F001 □	1,1,1-Trichloroethane	6	-
F001 □	Trichloroethylene	6	-
F001 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F001 □	Trichloromonofluoromethane	30	-
F002 □	Chlorobenzene	6	-
F002 □	o-dichlorobenzene	6	-
F002 □	Methylene Chloride	30	-
F002 □	Methylene Chloride (Pharmaceutical Industry)	-	-
F002 □	Tetrachloroethylene	6	-
F002 □	1,1,-Trichloroethane	6	-
F002 □	1,1,2-Trichloroethane	6	-
F002 □	Trichloroethylene	6	-
F002 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F002 □	Trichloromonofluoromethane	30	-

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F003 □	Acetone	160	-
F003 □	n-Butyl Alcohol	2.6	-
F003 □	Cyclohexanone		0.75
F003 □	Ethyl Acetate	33	-
F003 □	Ethyl Benzene	10	-
F003 □	Ethyl Ether	160	-
F003 □	Methanol		0.75
F003 □	Methyl Isobutyl Ketone	33	
F003 ■	Xylenes (total)	30	-
F004 □	Cresol	5.6	-
F004 □	Nitrobenzene	14	-
F005 □	Benzene	10	-
F005 □	Carbon Disulfide		4.8
F005 □	2-Ethoxyethanol	INCIN	
F005 □	Isobutyl Alcohol	170	
F005 □	Methyl Ethyl Ketone	36	
F005 □	2-Nitropropane	INCIN	
F005 □	Pyridine	16	
F005 ■	Toluene	10	

TABLE B

Waste Code	Non-waste water	Treatment Sub-category (if applicable, or NONE)	Technology Standards or Management (A-G based on list shown on pages 1/2)
D001		Ignitable Liquids based on 40 CFR 261.21 except for the 261.21 (a)(1) High TOC Subcategory, managed in Non-CWA/Non CWA equivalent, non Class 1 SDWA Systems	DEACT & meet UTSD, or RORGS, or CMBST
D001		Ignitable characteristic wastes, except for the 261.21 (a)(1) High TOC Subcategory, that are managed in CWA/CWA-equivalent Class 1 SDWA Systems.	DEACT
D001	NWW	Ignitable liquids based on 40 CFR 261.2 (a)(1) High TOC Ignitable Liquid Subcategory - greater than or equal to 10% TOC	RORGS or CMBST A
D008	NWW		A

TABLE C

If D001, D002, or D012 through D043 requires treatment to 268.40 standards, then each underlying hazardous constituent present in the waste at the point of generation and at a level above the UTS constituents listed treatment standard must be checked.

If D001 or D002 requires treatment of deactivation and meets F039 standards then each underlying hazardous constituent present in the waste at the point of generation and at a level above the F039 and UTS constituent listed treatment standard must be checked.

IF THERE ARE NO UTS CONSTITUENTS PRESENT IN THE WASTE UPON IT'S INITIAL GENERATION CHECK HERE ☐

Check the underlying individual constituents likely to be present from the list below:

	Regulated Constituent	WW	NWW
	Acenaphthylene	0.059	3.4
	acenaphthene	0.059	3.4
	Acetone	0.28	160
	Acetonitrile	5.6	1.8[2]
	Acetophenone	0.010	9.7
	2-Acetylaminofluorene	0.059	140
	Acrolein	0.29	NA
	Acrylamide	19[2]	23[2]
	Acrylonitrile	0.24	84
	Aldrin	0.021	0.066
	4-Aminobiphenyl	0.13	NA
	Aniline	0.81	14
	Anthracene	0.059	3.4
	Aramite	0.36	NA
	alpha-BHC	0.00014	0.066
	beta-BHC	0.00014	0.066
	delta-BHC	0.023	0.066
	gamma-BHC (Lindane)	0.00017	0.066
	Benzene	0.14	10
	Benz (a) anthracene	0.059	3.4
	Benzal chloride	0.055[3]	60[2]
	Benzo (b) fluoranthene	0.11	68
	Benzo (k) fluoranthene	0.11	68
	Benzo (g,h,i,) perylene	0.0055	18
	Benzo (a) pyrene	0.061	34
	Bromodichloromethane	0.35	15
	Bromoform (Tribromomethane)	0.63	15
	Bromomethane (methyl bromide)	0.11	15
	4-Bromophenyl phenyl ether	0.0055	15
	n-Butanol (n-butyl alcohol)	5.6	2.6
	Butyl benzyl phthalate	0.017	28
	2-sec Butyl 4.6 dinitrophenol (Dinoseb)	0.066	2.5
	Carbon Disulfide	3.8	1.8[1,2]
	Carbon Tetrachloride	0.057	6.0
	o-Dichlorobenzene	0.088	6.0
	p-Dichlorobenzene	0.090	6.0
	Dichlorodifluoromethane	0.23	7.2
	1,1-Dichloroethane	0.59	6.0
	1,2-Dichloroethane	0.21	6.0
	1,1-Dichloroethylene	0.025	6.0
	trans-1,2-Dichloroethylene	0.054	30
	2,4-Dichlorophenol	0.044	14
	2,6-Dichlorophenol	0.044	14
	1,2-Dichloropropane	0.85	18
	cis-1,3-Cichloropropylene	0.036	18
	trans-1,3-Dichloropropylene	0.036	18
	Dieldrin	0.017	0.13
	Diethyl phthalate	0.20	28
	p-Dimethylaminoazobenzene	0.13	NA
	4-Dimethyl Phenol	0.036	14
	Dimethyl Phthalate	0.047	28
	Di-n-butyl Phthalate	0.057	28
	1,4-Dinitrobenzene	0.32	2.3
	4,6-Dinitro-o-cresol	0.28	160

	Regulated Constituent	WW	NWW
	chlordane (alpha & gamma)	0.0033	0.26
	p-Chloroaniline	0.46	16
	Chlorobenzene	0.057	6.0
	Chlorobenzilate	0.10	NA
	2-chloro-1,3 butadiene	0.057	0.28[2]
	Chlorodibromomethane	0.27	15
	Chloroethane	0.036	6.0
	bis-(2-Chloroethoxy) methane	0.033	7.2
	bis-(2-Chloroethyl) ether	0.033	6.0
	Chloroform	0.046	6.0
	bis-(2-Chloroisopropyl) ether	0.055	6.0
	p-Chloro-m-cresol	0.018	14
	2-Chloroethyl Vinyl ether	0.062[3]	NA[2]
	Chloromethane (methyl chloride)	0.19	30
	2-Chloronaphthalene	0.055	5.6
	2-Chlorophenol	0.044	5.7
	3-Chloropropylene	0.036	30
	Chrysene	0.059	3.4
	o-Cresol	0.11	5.6
	Cresol (m- and p- isomers)	0.77	5.6
	Cyclohexanone	0.36	0.75[3]
	1,2-Dibromo-3-Chloropropane	0.11	15
	1,2-Dibromoethane (Ethylene dibromide)	0.028	15
	Dibromomethane	0.11	15
	2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
	o,p,DDD	0.023	0.087
	p,p-DDD	0.023	0.087
	o,p-DDE	0.031	0.087
	p,p-DDE	0.031	0.087
	o,p-DDT	0.0039	0.087
	p,p-DDT	0.0039	0.087
	Dibenz (a,h) anthracene	0.055	8.2
	Dibenz (a,e) pyrene	0.061	NA
	m-Dichlorobenzene	0.036	6.0
	Fluoranthene	0.068	3.4
	Fluorene	0.059	3.4
	Heptachlor	0.0012	0.066
	Heptachlor epoxide	0.016	0.066
	Hexachlorobenzene	0.055	10
	Hexachlorobutadiene	0.055	5.6
	Hexachlorocyclopentadiene	0.057	2.4
	Hexachlorodibenzo-furans	0.000063	0.001
	Hexachlorodibenzo-p-dioxins	0.000063	0.001
	Hexachloroethane	0.055	30
	Hexachloropropylene	0.035	30
	Indeno (1,2,3-c,d) pyrene	0.0055	3.4
	Iodomethane	0.19	65
	Isobutanol (Isobutyl Alcohol)	5.6	170
	Isodrin	0.021	0.066
	Isosafrole	0.081	2.6
	Kepone	0.0011	0.13
	Methacrylonitrile	0.24	84
	Methanol	5.6	0.75[1,2]
	Methapryilene	0.081	1.5

Regulated Constituent	WW	NWW
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propynitrosoamine	0.40	14
1,4-Dioxane	NA	170
Diphenylamine [4]	0.92	13[3]
Diphenylnitrosoamine [4]	0.92	13[3]
1,2-Diphenyl hydrazine	0.087	NA
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160
bis-(2-Ethylhexyl) phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
PCB's (Total all isomers or Aroclors)	0.10	10
Pentachlorobenzene	0.55	10
Pentachloroethane	0.55[2]	6.0[2]
Pentachlorodibenzo-furans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
Phorate	0.021	4.6
Phthalic acid	0.55[2]	28[2]
Phthalic anhydride	0.055	28[2]
Pronamide	0.93	15
Pyrene	0.067	82
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	79
2,4,5-T	0.72	79
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzo-furans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.80	10
Toxaphene	0.0095	2.6

Regulated Constituent	WW	NWW
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene-bis-(2-chloroaniline)	0.50	30
Methylene chloride	0.089	30
Methyl Ethyl Ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methanesulfonate	0.018	NA
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27[2]	14[2]
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028[2]	13[2]
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3[2]
N-Nitroso-di-n-butylamine	0.40	17
N-Nitrosomethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
1,2,4-Trichlorobenzene	0.55	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluorethane	0.057	30
Tris-(2,3-dibromopropyl)phosphate	0.11	0.10[2]
Vinyl chloride	0.27	6.0
Xylene (sum of o-, m-, and p-isomers)	0.32	30
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30[1]
Arsenic	1.4	5.0[1]
Barium	1.2	7.6[1]
Beryllium	0.82	0.014[1,2]
Cadmium	0.69	0.19[1]
Chromium (Total)	2.77	0.86[1]
Fluoride	35	NA
Lead	0.69	0.37[1]
Mercury (Not from Retorting)	0.15	0.025[1]
Antimony	1.9	2.1[1]
Nickel	3.98	5.0[1]
Selenium	0.82	0.16[1]
Silver	0.43	0.30[1]
Sulfide	14	NA
Thallium	1.4	0.078[1,2]
Vanadium	4.3	0.23[1,2]
Zinc	2.61[3]	NA

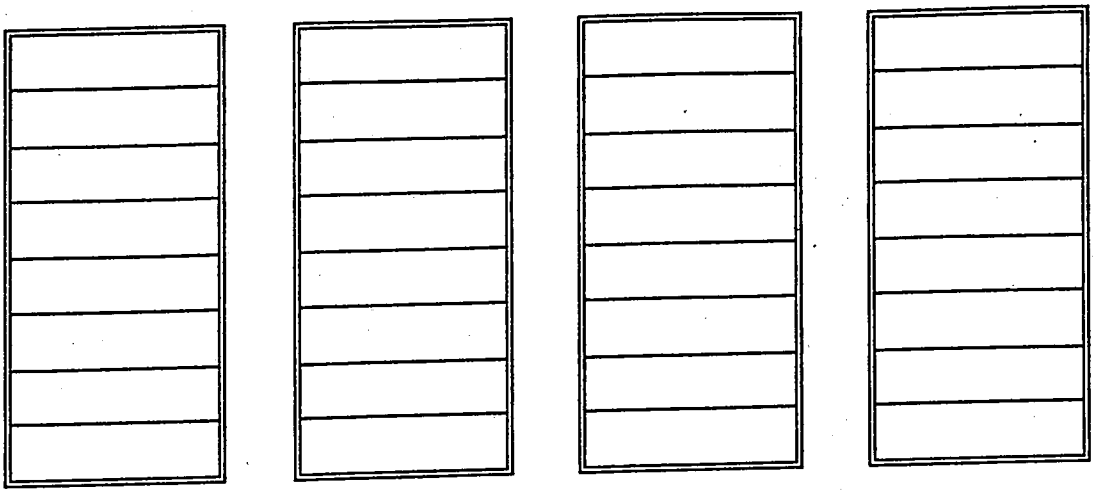
1. These concentrations are expressed in mg/L and are measured through an analysis of TCLP extract; all others are measured through a total waste analysis.
2. These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.
3. Zinc is not an Underlying Hazardous Constituent requiring treatment in D001, D002, or D012-D043 wastes.
4. These compounds are regulated by the sum of their concentration instead of as individual constituents.

NOTE: Wastewater units are in mg/L, non-wastewater are in mg/Kg.

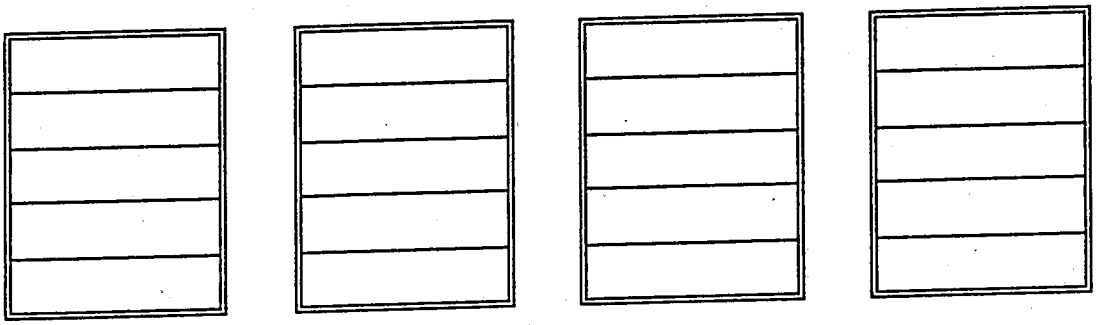
TABLE D
LAB PACK CERTIFICATION

(268.42, Appendix iv)

1. APPENDIX IV DRUMS:
This notification and certification applies to the following drums on this shipment. List the Lab Pack drum identification numbers below:



2. ALL DRUMS THAT MAY NOT BE PACKAGED AS APPENDIX IV TYPE LABPACKS:
The US EPA Hazardous waste codes are **D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.** The alternative treatment standard is incineration (INCIN). This notification applies to those wastes in the following drums on this shipment. List the Lab Pack drum identification numbers below:



CERTIFICATION:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

I hereby certify that all information in this and all associated documents is complete and accurate to the best of my knowledge and information has all the necessary permits and licenses for the waste that has been identified by the profile, if approved for management.

Authorized Representative Signature: x Shelly Heston

Print or Type Name: x Shelly Heston

Title: x ENV. MANAGER **Date:** x 7/11/2001

J:\USER\FORMS\BLANKS\LAND_BAN.4

EOG Environmental, Inc.
5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID988850056

A. Generator Name: Climax Molybdenum | Customer #: _____ | Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 | Billing Address: P.O. Box 1472
City, State, Zip: Ft Madison, Iowa 52627 | SIC Code: _____ | City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston | Title: _____ | Contact: Susan Garrett | Title: Trans. Coordinator
Telephone: 319-463-2224 | Ext. _____ | Fax #: _____ | Phone Number: (319) 524-8273 | Fax #: (319) 524-9019
EPA ID #: IAD000222653 | This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Leaded Paint W/Solvent
Process Generating Waste: Clean-up
Color: _____ Odor: _____ ☐ None ☒ Mild ☐ Strong ☐ Single Layer ☒ Double Layer ☐ Multi-Layer
Free Phases _____ ☒ Liquid 95 % ☐ Powder _____ % ☐ Solid 5 % ☐ Sludge _____ %

C. RCRA AND DOT INFORMATION
Is this a USEPA Hazardous Waste? ☒ Yes ☐ No Please list the USEPA Hazardous waste codes: D001, D008, F003, F005
Is this a DOT Hazardous Material? ☒ Yes ☐ No Anticipated Annual Volume: 55-220 /Units: Gal
Proper Shipping Name: RQ Waste Paint Related Material
Hazardous Class #: 3 PG #: II UN/NA #: 1263 Additional Description: Toluene , Xylene
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1 X 55 G
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55 G

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		Silver	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <500				
Lead	☐ <5 ☒ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☒ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☐ <1.4-1.7	☐ >1.7 Actual:
Total Suspended Solids:	☒ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☐ >20	Actual:
pH:	☐ <2	☐ 2-6	☐ 6-8	☒ 8-10	☐ 10-12.5	☐ >12.5 Actual:
BTU's:	☐ <1	☒ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:
Flash Point (Closed cup):	☐ <73°F	☒ 73-140°F	☐ >140-200°F	☐ >200°F		Actual:
Sulfer (%WT):	☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0		Actual:

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☒ Low ☐ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm)- 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Paint Pigments	5-10	%		%		%		%
Xylene	40-50	%		%		%		%
Toluene	40-50	%		%		%		%
		%		%		%		%
		%		%		%		%
		%		%		%		%

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed it is processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts as respect to waste disposal utilizing only information and manners that appear on the EOG Environmental "master Sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officers and/or employees of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X Shelly Heston — SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT
X Env. Manager — TITLE
X 5/24/2001 — DATE

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 29-Aug-01

Receiving
Number: 010821-13633

Items Received and Recycled

Quantity	Description
13.5	Computers - Other Components (lbs)
95.3	Computer (CRT) Monitors (lbs)
0.2	Batteries - Lithium (lbs)
10.8	Batteries - Alkaline (lbs)
63.7	Batteries - Lead Acid (lbs)
0.4	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
11	Non-PCB Capacitors
1	Ballasts - non PCB
41	Fluorescent Greater than 4'
40	High Intensity Discharge (HID)
178	Fluorescent 4' and Under

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE August 29, 2001

Please print or type. (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.

Manifest Document No. 109851

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM
2598 HWY 61 SOUTH
FT MADISON IA 52627

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number
I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone
515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00049	K	
b.						
c.						
d.						

GENERATOR

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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	Signature	Month	Day	Year
Joe Bartholomew	Joe Bartholomew	10	9	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
STEVE NELSON	Steve Nelson	10	26	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Larry Young	Larry Young	10	30	01

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EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.

Manifest Document No. 09851

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
[illegible]
[illegible]

4. Generator's Phone ( ) [illegible] IA 52627

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
IA0000109827

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number
IA0000109827

G. State Facility's ID

H. Facility's Phone 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	1	RQ,Polychlorinated Biphenyls,9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	[illegible]	DM	[illegible]	[illegible]	
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 95NAERG-171 AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-551-4812.

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 [illegible] | Signature [illegible] | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name [illegible] | Signature [illegible] | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

010821-13633

CUSTOMER	GENERATOR
Climax Molybdenum 2598 Hwy 61 South Ft Madison Ia 52627	Climax Molybdenum 2598 Hwy 61 South Ft Madison Ia 52627

SHIPPING OR P.O. # ST 2428 | DATE: 8-21-01 | X | PICKUP | | DELIVERED

QUANTITY	LAMP TYPE
175 Est	Fluorescent ≤ 4' and Compacts
27 Est	Fluorescent > 4'
	Shielded Fluorescent, all lengths
	U Shape and Circular
40	High Intensity Discharge
Est:_____ Lbs	Crushed Fluorescent Lamps(Act_____Lbs.)
	Other _____
	◀ TOTAL UNITS RECEIVED

DRUM

DROP	4'(190) 1	4'(80)___	8' 1	Steel___
PICKUP	4'(190) 1	4'(80)___	8' 1	Steel 1

NOTES:
2 monitors
3 keyboards
2 circuit boards

RECEIVED:	A P	DATE:	
PROCESSED:	A P	DATE:	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
2 Est	2 Est	Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
9	11	Capacitors
	37	Other Items: Transformers
		◀ TOTAL UNITS RECEIVED

BATTERIES

QUANTITY	TYPE	EST(Lbs.)	ACT(Lbs.)
1 Est	Lead acid	2	
2 3	Alkaline	3	
6	LITHIUM	1	
	◀ TOTAL UNITS RECEIVED		

NOTES:

RECEIVED, subject to the classification and regulations in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

This is to certify that the above described lamps/basllasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By: X [signature]
Date: 8-21-01 EPA #: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 2-Jan-02

Receiving
Number: 011220-14254

Items Received and Recycled

Quantity	Description
4.6	Computers - Other Components (lbs)
86.9	Computer (CRT) Monitors (lbs)
4	Ballasts - non PCB
31	Non-PCB Capacitors
93	High Intensity Discharge (HID)
29	Fluorescent Greater than 4'
147	Fluorescent 4' and Under
12.7	Crushed Fluorescent Lamps (lbs)

Certificate issued to:
CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. D. Floyd

DATE January 2, 2002

Please print or type. (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. | Manifest Document No. 10201 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Climax Molybdenum Company
2598 Highway 6 East
Fort Madison IA 52627

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: IA0000109827

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: IA0000109827

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00180	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
[redacted]
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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	Signature	Month	Day	Year
Shelly Heston	Shelly Heston	12	20	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
STEVE NELSON	Steve Nelson	12	20	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space: Item 13a is a field estimate. Actual measured weight is 39 K. dy

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Larry Young	Larry Young	12	21	01

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.	Manifest Document No. 10201	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
Wilson Logan Center
253 Center St Box 7
Fruitland IA 52749

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	ONE	DM	00180	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
EMERGENCY TELEPHONE NUMBER 800-631-4812.

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	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]				

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

A-TEC RECYCLING INC.

BILL OF LADING

011220-14254

CUSTOMER	GENERATOR
CLIMAX MOLYBDENUM COMPANY ATTN ACCTS PAYABLE PO BOX 220 FORT MADISON, IA 52627	CLIMAX MOLYBDENUM COMPANY 2598 HIGHWAY 61 SOUTH FORT MADISON IA 52627

SHIPPING OR P.O. #	DATE:		PICKUP		DELIVERED
2428	12/20/01	✓			

QUANTITY	LAMP TYPE
100 est	Fluorescent ≤ 4' and Compacts
31 est	Fluorescent > 4'
	All Shielded Fluorescent
	U Shape and Circular
100 est	High Intensity Discharge
Est: 10 Lbs	Crushed Lamps (Act_____Lbs.)
	Other_____
TOTAL UNITS	NOTES

DRUM

DROP	4'(190)____	4'(80)____	8'____	Steel____
PICKUP	4'(190)____	4'(80)____	8'____	Steel____
RECEIVED		AP	DATE	
PROCESSED		AP	DATE	

COMPUTERS

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Monitors	100	
	Keyboards	10	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
3 est	4 est	Ballasts (Fluorescent 4' & under)
		Ballasts (Fluorescent over 4')
		HID Ballasts
20 est	20 est	Capacitors
20 est	20 est	Other Items Transformers
TOTAL UNITS		NOTES

BATTERIES

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	TOTAL UNITS RECEIVED		

NOTES

RECEIVED, subject to the classification and regulations in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

T[illegible] to certify that the above described lamps/ballasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized

By: _____

Date: _____ EPA#: IA0000109827

A-TEC Recycling, Inc. Accepted By: _____

5745 N.E. 17th STREET • P.O. BOX 7391 • DES MOINES, IOWA 50309 • 515-244-7357 • 800-551-4912 • FAX 515-263-6970

No. 3155-13

Date: 2/5/02

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2598 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number WIK105229 **Received by us on** 1/24/02

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-0

Kandy Lee Schmitz

Authorized Signature

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

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. [illegible]
Manifest Document No. [illegible]
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
Site Location If Different

A. State Manifest Document Number WIK 105229

B. State Generator's ID

4. Generator's Phone (319) 463-2224 Ft. Madison IA 52627

5. Transporter 1 Company Name
System Logistics

6. US EPA ID Number [illegible]

C. State Transporter's ID

D. Transporter's Phone (940) 479-2633

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
EOG Disposal, Inc.
5611 W. Hemlock Street
Milwaukee WI 53223

10. US EPA ID Number [illegible]

G. State Facility's ID

H. Facility's Phone (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ WASTE Acetone, 3, UN1090, PG-II	1	5M			D001
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
A. [illegible]155-0;19991164;Spent Acetone;(ERG#127)
B: D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title [illegible]
Signature [illegible]
Date Month Day Year [illegible]

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title
Signature
Date Month Day Year

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials
Printed/Typed Name & Position Title
Signature
Date 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 & Position Title Martin W. Schmit Plant Mngr
Signature [illegible]
Date Month Day Year 01 24 2002

GENERATOR

TRANSPORTER

FACILITY

PA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain

Copies 1 & 3 mail to Wis. DNR at above address.

mergency 24 Hour Assistance
nd Spill Reporting
elephone Number: (800) 943-0003

COPY 5-
FACILITY SEND TO GENERATOR

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.

STATE OF WISCONSIN

Chapter 291, Wis. Stats.
Form 4400-66P Rev. 1-99

ALL COPIES MUST BE LEGIBLE, PLEASE TYPE

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

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.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
T A D 0 0 0 2 2 2 6 5 3	5 2 2 9		

3. Generator's Name and Mailing Address / Site Location If Different

Climax Molybdenum
2598 Hwy 61
4. Generator's Phone (319)463-2224 Ft Madison IA 52627

A. State Manifest Document Number: WI K 105229

B. State Generator's ID:

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID
System Logistics	T X R 0 0 0 0 3 0 5 9 1	D. Transporter's Phone (940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID
		F. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility's ID
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee WI 53223	W I D 9 8 3 5 8 0 0 5 6	H. Facility's Phone (414) 353-1156

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
RQ WASTE Acetone, 3, UN1090, PG-II	1	DM	30	G	D 0 0 1
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
A 3155-0;19991164;Spent Acetone;(ERG#127)
D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information C:
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

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 governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also 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 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 & Position Title	Signature	Date (Month Day Year)
Joseph L. Hamilton Env. Technician		01 23 00

TRANSPORTER

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

FACILITY

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

PA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:
1 — Generator send to Wis. DNR
2 — Generator retain
3 — Facility send to Wis. DNR
4 — Facility retain
5 — Facility send to Generator
6 — Transporter retain
Copies 1 & 3 mail to Wis. DNR at above address.

mergency 24 Hour Assistance
nd Spill Reporting
elephone Number: (800) 943-0003

COPY 2-
GENERATOR RETAIN

EOG Disposal, Inc.
WID988580056
5611 W. Hemlock St.
Milwaukee, WI 53223
414/353-1156 FAX: 414/353-1822

Generator Name: Climax Molybdenum

EPA ID#: IAD000222653

Manifest Number: WI K105229

Hazardous Waste Restricted from Land Disposal Certification

Line item A (A, B, C or D) is subject to the land disposal restrictions of 40CFR Part 268. In accordance with 40CFR 268.7, this generator is providing notice that the waste does not meet the treatment standards specified in Part 268 Subpart D, or does not meet the prohibitions specified in 268.32 or RCRA section 3004 (d).

_____ The shipment contains F001 - F005 spent solvents (Complete Table A, page 2)

X The shipment contains other Land Disposal Restricted materials. List all US EPA hazardous waste codes that apply to this waste shipment. (Complete Table B, page 3) (D001 CMBST)

_____ The shipment contains F039 multi-source leachate, or D001 (DEACT), D002 (DEACT) waste prohibited under 40 CFR Section 268.37 or D012 through D043 waste prohibited under the revision to 40 CFR Section 268.48. (Complete Table B, page 3 and/or Table C, page 4)

_____ The shipment contains labpacks (Complete Table D, page 6)

Waste Management. Using the following guidelines based on 40CFR 268.7, enter the appropriate letter in the "Management" column located on Table B.

A. RESTRICTED WASTE REQUIRING FURTHER TREATMENT. This waste must be treated in the applicable treatment standards set forth in 40CFR part 266 subpart D, 268.32, or RCRA Section 3004(d). For "Hazardous Debris", this hazardous debris is subject to the alternative treatment standards of 40CFR 268.45.

B. RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS. " I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40CFR 268 subpart D, and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS A SPECIFIED TECHNOLOGY AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY. " I certify under penalty of law that the waste has been treated in accordance with the requirements of 40CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D. GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the non wastewater organic constituents have been treated by incineration in units operated in accordance with 40CFR Part 264 Subpart O or 40CFR Part 265 Subpart D or by combustion in fuel substitution units in accordance with applicable technical requirements, and I have been unable to detect the non-wastewater organic constituents despite having used good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

E. RESTRICTED WASTE SUBJECT TO A VARIANCE. This waste is subject to a national capacity variance, a treatable varianc or a case - by - case extension. Enter the effective date of the prohibition in this column as well. For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40CFR Part 265.45."

F. RESTRICTED WASTE WHICH CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT. " I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32, or RCRA Section 3004(d), and therefore can be land disposed without further treatment." A

copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. " I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40CFR Part 268 subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004 (d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification including the possibility of a fine and imprisonment."

G. ● WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS. This waste is a newly identified waste that is not currently subject to any 40CFR 265 restrictions.

TABLE A

Treatment Standards for F001 - F005 Spent Solvents

Waste Code	Constituents of Concern	Non-Wastewater	
		Total compostion mg/kg	TCLP mg/L
F001 □	Carbon Tetrachloride	6	-
F001 □	Methylene Chloride	30	-
F001 □	Tetrachloroethylene	6	-
F001 □	1,1,1-Trichloroethane	6	-
F001 □	Trichloroethylene	6	-
F001 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F001 □	Trichloromonofluoromethane	30	-
F002 □	Chlorobenzene	6	-
F002 □	o-dichlorobenzene	6	-
F002 □	Methylene Chloride	30	-
F002 □	Methylene Chloride (Pharmaceutical Industry)	-	-
F002 □	Tetrachloroethylene	6	-
F002 □	1,1,-Trichloroethane	6	-
F002 □	1,1,2-Trichloroethane	6	-
F002 □	Trichloroethylene	6	-
F002 □	1,1,2-Trichloro-1,2,2-trifluoroethane	30	-
F002 □	Trichloromonofluoromethane	30	-

Waste Code	Constituents of Concern	Non-Wastewater	
		Total composition mg/kg	TCLP mg/L
F003 □	Acetone	160	-
F003 □	n-Butyl Alcohol	2.6	-
F003 □	Cyclohexanone		0.75
F003 □	Ethyl Acetate	33	-
F003 □	Ethyl Benzene	10	-
F003 □	Ethyl Ether	160	-
F003 □	Methanol		0.75
F003 □	Methyl Isobutyl Ketone	33	
F003 □	Xylenes (total)	30	-
F004 □	Cresol	5.6	-
F004 □	Nitrobenzene	14	-
F005 □	Benzene	10	-
F005 □	Carbon Disulfide		4.8
F005 □	2-Ethoxyethanol	INCIN	
F005 □	Isobutyl Alcohol	170	
F005 □	Methyl Ethyl Ketone	36	
F005 □	2-Nitropropane	INCIN	
F005 □	Pyridine	16	
F005 □	Toluene	10	

TABLE B

Waste Code	Non-waste water	Treatment Sub-category (if applicable, or NONE)	Technology Standards or Management (A-G based on list shown on pages 1/2)
☐ D001		Ignitable Liquids based on 40 CFR 261.21 except for the 261.21 (a)(1) High TOC Subcategory, managed in Non-CWA/Non CWA equivalent, non Class 1 SDWA Systems	DEACT & meet UTSD, or RORGS, or CMBST
☐ D001		Ignitable characteristic wastes, except for the 261.21 (a)(1) High TOC Subcategory, that are managed in CWA/CWA-equivalent Class 1 SDWA Systems.	DEACT
■ D001	NWW	Ignitable liquids based on 40 CFR 261.2 (a)(1) High TOC Ignitable Liquid Subcategory - greater than or equal to 10% TOC	RORGS or CMBST A

TABLE C

If D001, D002, or D012 through D043 requires treatment to 268.40 standards, then each underlying hazardous constituent present in the waste at the point of generation and at a level above the UTS constituents listed treatment standard must be checked.

If D001 or D002 requires treatment of deactivation and meets F039 standards then each underlying hazardous constituent present in the waste at the point of generation and at a level above the F039 and UTS constituent listed treatment standard must be checked.

IF THERE ARE NO UTS CONSTITUENTS PRESENT IN THE WASTE UPON IT'S INITIAL GENERATION CHECK HERE ☐

Check the underlying individual constituents likely to be present from the list below:

	Regulated Constituent	WW	NWW
	Acenaphthylene	0.059	3.4
	acenaphthene	0.059	3.4
	Acetone	0.28	160
	Acetonitrile	5.6	1.8[2]
	Acetophenone	0.010	9.7
	2-Acetylaminofluorene	0.059	140
	Acrolein	0.29	NA
	Acrylamide	19[2]	23[2]
	Acrylonitrile	0.24	84
	Aldrin	0.021	0.066
	4-Aminobiphenyl	0.13	NA
	Aniline	0.81	14
	Anthracene	0.059	3.4
	Aramite	0.36	NA
	alpha-BHC	0.00014	0.066
	beta-BHC	0.00014	0.066
	delta-BHC	0.023	0.066
	gamma-BHC (Lindane)	0.00017	0.066
	Benzene	0.14	10
	Benz (a) anthracene	0.059	3.4
	Benzal chloride	0.055[2]	60[2]
	Benzo (b) fluoranthene	0.11	68
	[illegible]zo (k) fluoranthene	0.11	68
	[illegible]zo (g,h,i,) perylene	0.0055	18
	Benzo (a) pyrene	0.061	34
	Bromodichloromethane	0.35	15
	Bromoform (Tribromomethane)	0.63	15
	Bromomethane (methyl bromide)	0.11	15
	4-Bromophenyl phenyl ether	0.0055	15
	n-Butanol (n-butyl alcohol)	5.6	2.6
	Butyl benzyl phthalate	0.017	28
	2-sec Butyl 4.6 dinitrophenol (Dinoseb)	0.066	2.5
	Carbon Disulfide	3.8	1.8[1,2]
	Carbon Tetrachloride	0.057	6.0
	o-Dichlorobenzene	0.088	6.0
	p-Dichlorobenzene	0.090	6.0
	Dichlorodifluoromethane	0.23	7.2
	1,1-Dichloroethane	0.59	6.0
	1,2-Dichloroethane	0.21	6.0
	1,1-Dichloroethylene	0.025	6.0
	trans-1,2-Dichloroethylene	0.054	30
	2,4-Dichlorophenol	0.044	14
	2,6-Dichlorophenol	0.044	14
	1,2-Dichloropropane	0.85	18
	cis-1,3-Cichloropropylene	0.036	18
	trans-1,3-Dichloropropylene	0.036	18
	Dieldrin	0.017	0.13
	Diethyl phthalate	0.20	28
	p-Dimethylaminoazobenzene	0.13	NA
	2,4-Dimethyl Phenol	0.036	14
	Dimethyl Phthalate	0.047	28
	[illegible]utyl Phthalate	0.057	28
	[illegible]Dinitrobenzene	0.32	2.3
	4,6-Dinitro-o-cresol	0.28	160

	Regulated Constituent	WW	NWW
	chlordane (alpha & gamma)	0.0033	0.26
	p-Chloroaniline	0.46	16
	Chlorobenzene	0.057	6.0
	Chlorobenzilate	0.10	NA
	2-chloro-1,3 butadiene	0.057	0.28[2]
	Chlorodibromomethane	0.27	15
	Chloroethane	0.036	6.0
	bis-(2-Chloroethoxy) methane	0.033	7.2
	bis-(2-Chloroethyl) ether	0.033	6.0
	Chloroform	0.046	6.0
	bis-(2-Chloroisopropyl) ether	0.055	6.0
	p-Chloro-m-cresol	0.018	14
	2-Chloroethyl Vinyl ether	0.062[2]	NA[2]
	Chloromethane (methyl chloride)	0.19	30
	2-Chloronaphthalene	0.055	5.6
	2-Chlorophenol	0.044	5.7
	3-Chloropropylene	0.036	30
	Chrysene	0.059	3.4
	o-Cresol	0.11	5.6
	Cresol (m- and p- isomers)	0.77	5.6
	Cyclohexanone	0.36	0.75[2]
	1,2-Dibromo-3-Chloropropane	0.11	15
	1,2-Dibromoethane (Ethylene dibromide)	0.028	15
	Dibromomethane	0.11	15
	2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
	o,p,DDD	0.023	0.087
	p,p-DDD	0.023	0.087
	o,p-DDE	0.031	0.087
	p,p-DDE	0.031	0.087
	o,p-DDT	0.0039	0.087
	p,p-DDT	0.0039	0.087
	Dibenz (a,h) anthracene	0.055	8.2
	Dibenz (a,e) pyrene	0.061	NA
	m-Dichlorobenzene	0.036	6.0
	Fluoranthene	0.068	3.4
	Fluorene	0.059	3.4
	Heptachlor	0.0012	0.066
	Heptachlor epoxide	0.016	0.066
	Hexachlorobenzene	0.055	10
	Hexachlorobutadiene	0.055	5.6
	Hexachlorocyclopentadiene	0.057	2.4
	Hexachlorodibenzo-furans	0.000063	0.001
	Hexachlorodibenzo-p-dioxins	0.000063	0.001
	Hexachloroethane	0.055	30
	Hexachloropropylene	0.035	30
	Indeno (1,2,3-c.d) pyrene	0.0055	3.4
	Iodomethane	0.19	65
	Isobutanol (Isobutyl Alcohol)	5.6	170
	Isodrin	0.021	0.066
	Isosafrole	0.081	2.8
	Kepone	0.0011	0.13
	Methacrylonitrile	0.24	84
	Methanol	5.6	0.75[1,2]
	Methapyrilene	0.081	1.5

Regulated Constituent	WW	NWW
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propynitrosoamine	0.40	14
1,4-Dioxane	NA	170
[redacted]phenylamine [4]	0.92	13 [3]
[redacted]phenyinitrosoamine [4]	0.92	13 [3]
1,2-Diphenyl hydrazine	0.087	NA
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160
bis-(2-Ethylhexyl) phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
PCB's (Total all isomers or Aroclors)	0.10	10
Pentachlorobenzene	0.55	10
Pentachloroethane	0.55 [2]	6.0 [2]
Pentachlorodibenzo-furans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
[redacted]ate	0.021	4.6
Phthalic acid	0.55 [2]	28 [2]
Phthalic anhydride	0.055	28 [2]
Pronamide	0.93	15
Pyrene	0.067	82
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	79
2,4,5-T	0.72	79
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzo-furans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.80	10
Toxaphene	0.0095	2.6

Regulated Constituent	WW	NWW
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene-bis-(2-chloroaniline)	0.50	30
Methylene chloride	0.089	30
Methyl Ethyl Ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methanesulfonate	0.018	NA
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27 [2]	14 [2]
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028 [2]	13 [2]
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3 [2]
N-Nitroso-di-n-butylamine	0.40	17
N-Nitrosomethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
1,2,4-Trichlorobenzene	0.55	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
Tris-(2,3-dibromopropyl)phosphate	0.11	0.10 [2]
Vinyl chloride	0.27	6.0
Xylene (sum of o-, m-, and p-isomers)	0.32	30
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30 [1]
Arsenic	1.4	5.0 [1]
Barium	1.2	7.6 [1]
Beryllium	0.82	0.014 [1,2]
Cadmium	0.69	0.19 [1]
Chromium (Total)	2.77	0.86 [1]
Fluoride	35	NA
Lead	0.69	0.37 [1]
Mercury (Not from Retorting)	0.15	0.025 [1]
Antimony	1.9	2.1 [1]
Nickel	3.98	5.0 [1]
Selenium	0.82	0.16 [1]
Silver	0.43	0.30 [1]
Sulfide	14	NA
Thallium	1.4	0.078 [1,2]
Vanadium	4.3	0.23 [1,2]
Zinc	2.61 [3]	NA

These concentrations are expressed in mg/L and are measured through an analysis of TCLP extract; all others are measured through a total waste analysis.

These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.

Zinc is not an Underlying Hazardous Constituent requiring treatment in D001, D002, or D012-D043 wastes.

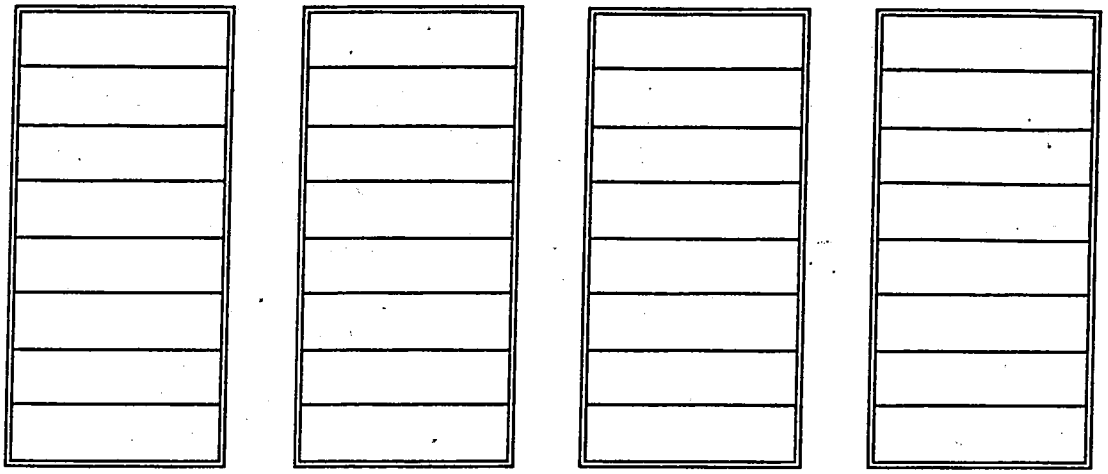
These compounds are regulated by the sum of their concentration instead of as individual constituents.

NOTE: Wastewater units are in mg/L, non-wastewater are in mg/Kg.

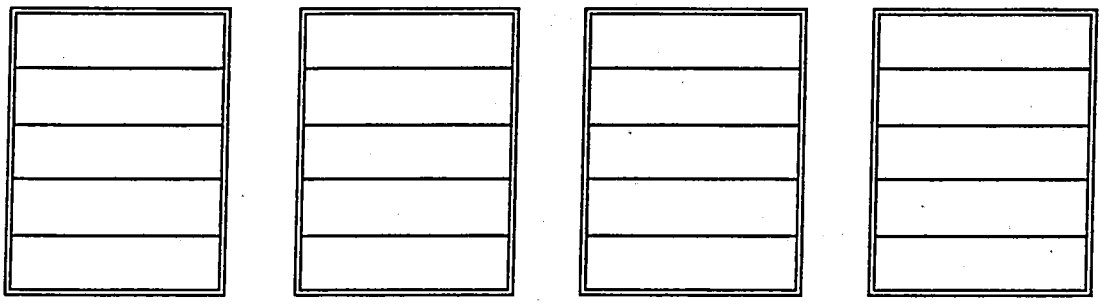
TABLE D
LAB PACK CERTIFICATION

(268.42, Appendix iv)

1. APPENDIX IV DRUMS:
This notification and certification applies to the following drums on this shipment. List the Lab Pack drum identification numbers below:



2. ALL DRUMS THAT MAY NOT BE PACKAGED AS APPENDIX IV TYPE LABPACKS:
The US EPA Hazardous waste codes are **D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.** The alternative treatment standard is incineration (INCIN). This notification applies to those wastes in the following drums on this shipment. List the Lab Pack drum identification numbers below:



CERTIFICATION:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support the certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I have submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

I hereby certify that all information in this and all associated documents is complete and accurate to the best of my knowledge and information has all the necessary permits and licenses for the waste that has been identified by the profile, if approved for management.

Authorized Representative Signature: X Shelly Heston

Print or Type Name: X Shelly Heston

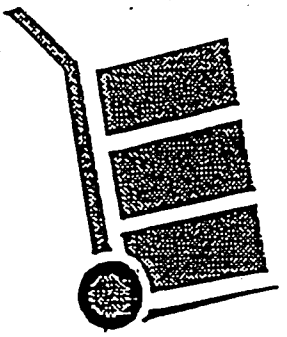
Title: X Manager Env Affairs Date: X 1/23/02

C:\USER\FORMS\BLANKS\LAND_BAN.4

--------- PERFORMANCE ORIENTED PACKAGING HM-181 ----------

Regulations require drummed hazardous waste to meet specific guidelines before shipment. Improper storage and/or labeling can subject you to fines.....

Recommendations:



Solids and Sludges:
Use open top 1A2 (17H) drums with 5/8" bolts and 5/8" heavy gauge cinch rings.

Liquids:
Use closed top 1A1 (17E) drums with 2-1/2" bungs.

A. Packaging ———

Physical Condition of Drums:

1. All drums should be in good physical condition, properly sealed, and meet D.O.T. specifications for the material contained.
2. Drums may not have any holes or dents greater than 1/2" impression.
3. Drums may not have excessive rust which could affect the integrity of the drum.
4. Plastic or poly lined drums should be used for corrosive materials only.
5. Wipe off any waste material spilled on the outside of the drum.
6. Bulging or swollen drums are not acceptable for transport. All drums must stand firmly on the bottom rim.

Container Closures:

1. All drums must have 2-1/2" bungs on the top to simplify inspection of the contents.
2. Open head drums must be securely fastened using 5/8" heavy gauge bolted cinch rings. Lever locked drums are not acceptable.

B. Labeling ———

Hazard Labeling:

1. Each drum must have the proper 4" x 4" hazard label (Corrosive, Flammable Liquid, Poison, etc.) clearly displayed on top and side.
2. Each drum must have all old labels removed. Any stenciling or conflicting markings must be painted or covered over completely.

Marker Labeling:

1. All drums must be marked in accordance with D.O.T. and/or EPA and State government regulations.
2. Marking labels must be durable and displayed clearly on the side of the drum.
3. As a courtesy to the facility, we ask you to place a marking label on the top of the drum for ease of identification.
4. Marking labels must contain all of the following information:

- Proper Shipping Name
- Generator's Name and Address
- EPA Hazardous Materials Disposal
- Waste Manifest Number

If drums are stored for an extended period of time, or are exposed to weather, labels can fade or peel. Please replace these labels for safe and legal transport

1/17/02

Climax Molybdenum
Shelly Heston
2598 Hwy 61
Ft. Madison, IA 52627

RE: Recertification

Dear Shelly Heston:

WS# **3155-0** Date of Original Profile: **9/16/99**
Name: **Spent Acetone**

EOG Disposal, Inc. is committed to the need of our customers and to the regulatory agencies under which we operate. The EOG Disposal **Plan of Operation** requires that we recertify each of our customers waste streams on an annual basis.

Please review and sign the attached "Waste Profile Sheet" and return to us. **The Wisconsin DNR requires us to have an original signature on file.** If we do not receive a response within thirty (30) days of the date of this letter, we will also consider this waste stream to have expired.

YES, I would like to renew this profile(s) for another year.

Per 40 CFR 265.13, the characteristics of this waste(s) have not changed. I also certify that I am an employee of the generator and I am authorized to sign this recertification.

X Shelly Heston
Signature

X Manager Env. Affairs
Title

X 1/18/02
Date

NO, I do not wish to renew this profile(s) for one more year.

I also certify that I am an employee of the generator, and I am authorized to sign this waste stream cancellation.

X _____
Signature

X _____
Title

X _____
Date

Thank you for your cooperation. If you have any questions, please contact your sales representative or call me at 1-800-234-1156.

Sincerely,

EOG ENVIRONMENTAL, INC.
EOG DISPOSAL, INC.

Susan A. Ingram

Susan Ingram
Approval Coordinator

5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223
(414) 353-1156 1-800-234-1156
EOG Environmental, Inc. WID988580056

WS Number: 3155-0

SECTION A - GENERAL INFORMATION

Generator Name:	Climax Molybdenum		# 3155	Bill to:	Lori Seabold
Address:	2589 Hwy 61		SIC #:		HEI Consultants
City, State, Zip:	Ft. Madison	IA 52627			P.O. Box 1472
Contact:	Shelly Heston				Keokuk IA 52632
Telephone:	(319) 463-7224 Ext. 0000		FAX #: (319) 463-7159 Ext		
EPA ID:	IAD000222653		This profile sheet was completed using: Generator Knowledge		

SECTION B - WASTE DESCRIPTION AND GENERAL CHARACTERISTICS

Name of Waste: Spent Acetone
Process Generating Waste: Lab testing
Color: Clear Odor: Solvent , Mild ws Layer: Single Free Phase:
Consistency Liquid: 100 % Powder: % Solid: % Sludge: % Approval # 19991164

SECTION C - RCRA AND DOT INFORMATION

IS THIS A USEPA HAZARDOUS WASTE?) IS THIS A DOT HAZARDOUS MATERIAL? Y Anticipated Annual Volume: 55-110 Units: gal
USEPA HAZARDOUS WASTE CODES: D001,
Proper Shipping Name: RQ Waste Acetone
Hazard Class: 3 ID #: UN1090 PG No: II Additional Description:
CERCLA Reportable Quantity (RQ): .00 Volume on hand: 1x55 Shipment Method: Drum Drum Size/Type: 0/ DM

SECTION D - SPECIAL HANDLING INSTRUCTIONS

Treatment Method Fuel Blending
Special Handling: Proper PPE Required Is a sample provided? N

SECTION E - METALS

This waste contains the following metals based on Generator Knowledge

METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL
Arsenic:	<5	Mercury:	<0.2	Nickel:	<5
Barium:	<100	Selenium:	<1	Thalium:	<5
Cadmium:	<1	Silver:	<5	Zinc:	<5
Chromium:	<5	Chromium-Hex:	<5		
Lead:	<5	Copper:	<5	ALL are (parts per million)	

SECTION F - PHYSICAL/CHEMICAL PROPERTIES

	EST.	Actual:		EST.	Actual:
Specific Gravity:	0.8 - 1.0		BTU:	0-12	
Total Suspended Solids:	<0.5		Flash Point Degrees F.:	73-140	
pH:	6-8		Sulfur (%WT):	<0.5	

SECTION G - HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS

Reactivity: None Treatment Method: Fuel Blending
Viscosity: Low Are TC Codes Present? (If yes, see USEPA Codes.)
Halogens (ppm's) Chlorine: 0 Bromine: 0 Fluorine: 0 Iodine: 0
Cyanides (ppm's): 0 PCB'S (ppm's): 0 Pesticides. 0 Sulfides (ppm's): 0 Phenolics 0

SECTION H - CHEMICAL COMPOSITION (must total 100%)

acetone	90 %	%	%	%
mineral oil	0-2 %	%	%	%
isobutyl alcohol	0-2 %	%	%	%
methyl isobutyl alcohol	0-2 %	%	%	%
ethyl alcohol	0-2 %	%	%	%
molybdenum	0-2 %	%	%	%
	%	%		

I hereby certify that all information submitted in this and all attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc., as Generator's agent for disposof waste. Accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 8-May-02

Receiving
Number: 020501-15034

Items Received and Recycled

Quantity	Description
94.2	Computers - Other Components (lbs)
2	Batteries - Lithium (lbs)
15	Batteries - Lead Acid (lbs)
5	Non-PCB Capacitors
1.1	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
68	Fluorescent Greater than 4'
136	Computer (CRT) Monitors (lbs)
15.2	Batteries - Alkaline (lbs)
20	Ballasts - non PCB
15	High Intensity Discharge (HID)
116	Fluorescent 4' and Under

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY R. J. Floyd

DATE May 8, 2002

15034

Please print or type. (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.

Manifest Document No. 10069

2. Page 1 of 1

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

GENERATOR

3. Generator's Name and Mailing Address
Climax Molybdenum Company
2598 Hwy 61 South
Ft Madison IA 52627

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
IA0000109827

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number
IA0000109827

G. State Facility's ID

H. Facility's Phone
515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00024	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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	Signature	Month	Day	Year
JOSEPH L. BARTHOLOMEW	Joseph L. Bartholomew	05	01	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
STEVE NELSON	Steve Nelson	05	01	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Larry Young	Larry Young	05	07	02

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.

Manifest Document No. 10069

2. Page 1 of 1

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

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: I A 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ,Polychlorinated Biphenyls,9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)						
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO OSNAERG-171
AND LAND BAN NOTIFICATION WHICH ARE ATTACHED.
EMERGENCY TELEPHONE NUMBER 800-451-8512.

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	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

GENERATOR COPY

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 25-Sep-02

Receiving
Number: 020917-15692

Items Received and Recycled

Quantity	Description
53.6	Computers - Other Components (lbs)
7.3	Batteries - Alkaline (lbs)
37.7	Batteries - Lead Acid (lbs)
4.9	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
5	Non-PCB Capacitors
4	Ballasts - non PCB
80	Fluorescent Greater than 4'
72	Fluorescent 4' and Under
534.5	Computer (CRT) Monitors (lbs)

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY Diana Shera

DATE September 25, 2002

15692

Please print or type. (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. | Manifest Document No. 110438 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

GENERATOR

Generator's Name and Mailing Address: Clinic Molgaard Company, 2598 East 6th South, Ft Madison IA 52627

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: **A-TEC RECYCLING, INC.** | 6. US EPA ID Number: IA0000109827 | C. State Transporter's ID | D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | F. Transporter's Phone

9. Designated Facility Name and Site Address: A-TEC RECYCLING, INC., 5745 NE 17TH STREET, DES MOINES, IA 50313 | 10. US EPA ID Number: IA0000109827 | G. State Facility's ID | H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00028	K	
b.						
c.						
d.						

Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171

[redacted]

EMERGENCY TELEPHONE NUMBER **800-551-4912.**

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	Signature	Month	Day	Year
JOSEPH L. BARTHOLOMEW	Joseph L. Bartholomew	09	17	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
STEVE NELSON	Steve Nelson	09	17	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Rich Young	Rich Young	09	23	02

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ORIGINAL-RETURN TO GENERATOR

Please print or type. (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.

Manifest Document No. 10438

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
Alman Molgaard Company
2593 HWY 6 South
Ft Madison IA 50627

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
A-TEC RECYCLING, INC.

6. US EPA ID Number
IA0000109827

C. State Transporter's ID

D. Transporter's Phone 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number
IA0000109827

G. State Facility's ID

H. Facility's Phone 515-244-7357

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00028	K	
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171
[redacted]
EMERGENCY TELEPHONE NUMBER 800-551-4912.

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: [illegible]

Signature: [illegible]

Month Day Year: [illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Steve Nelson

Signature: [illegible]

Month Day Year: [illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

FACILITY

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

Signature

Month Day Year

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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GENERATOR COPY

A-TEC RECYCLING INC.

BILL OF LADING

020917-15692

CUSTOMER

Climax Molybdenum Company
Attn: Accts Payable
PO Box 220
Ft Madison Ia 52627

GENERATOR

Climax Molybdenum Company
2598 Highway 61 South
Ft Madison Ia
52627

SHIPPING OR P.O. # FT2428 | DATE: 9-17-02 | X PICKUP | DELIVERED

QUANTITY	LAMP TYPE
72	Fluorescent ≤ 4' and Compacts
80	Fluorescent > 4'
	All Shielded Fluorescent
	U Shape and Circular
	High Intensity Discharge
Est:_____Lbs	Crushed Lamps (Act_____Lbs.)
	Other_____
TOTAL UNITS	NOTES

DRUM

DROP	4'(190)	1	4'(80)		8'	1	Steel 2
PICKUP	4'(190)	1	4'(80)		8'	1	Steel 5

RECEIVED A P DATE
PROCESSED A P DATE

COMPUTERS

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Monitors	300	
	Misc	200	

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
1	4	Ballasts (Fluorescent 4' & under)
1		Ballasts (Fluorescent over 4')
		HID Ballasts
1		Capacitors
	2	Other Items Transformers
TOTAL UNITS		NOTES

BATTERIES

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	Lead acid	3	
	Alkaline	10	
	NICAD	5	
	TOTAL UNITS RECEIVED		

NOTES

RECEIVED, subject to the classification and regulations in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

I certify to certify that the above described lamps/ballasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized By: X [signature]
Date: 9-17-02 EPA#: IA0000109827
A-TEC Recycling, Inc. Accepted By: [signature]

CERTIFICATE OF RECYCLING

A-TEC Recycling Inc. hereby certifies that the following described materials were recycled in accordance with all applicable Federal, State and County Regulations on the date as indicated.

Processing
Date: 18-Dec-02

Receiving
Number: 021211-16120

Items Received and Recycled

Quantity	Description
77.4	Computer (CRT) Monitors (lbs)
152.4	Computers - Other Components (lbs)
3.3	Batteries - Alkaline (lbs)
43.9	Batteries - Lead Acid (lbs)
12.6	Batteries - Nickel Cadmium (Ni-Cad) (lbs)
8	Non-PCB Capacitors
6	Ballasts - non PCB
21	Fluorescent Greater than 4'
5	High Intensity Discharge (HID)
53	Fluorescent 4' and Under

Certificate issued to:

CLIMAX MOLYBDENUM COMPANY
ATTN: ACCTS PAYABLE
PO BOX 220
FORT MADISON, IA 52627

Generator:

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
FORT MADISON, IA 52627

A-TEC RECYCLING INC.

BY Diana Shera

DATE December 18, 2002

Please print or type. (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. IAD000222653 Manifest Document No. 110637

2. Page 1 of

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

3. Generator's Name and Mailing Address: Climax Molybdenum Comp. 2598 Highway 61 South Fort Madison, IA 52627

4. Generator's Phone: (319) 463-2222

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: A-TEC RECYCLING, INC.

6. US EPA ID Number: A 0 0 0 0 0 1 0 9 8 2 7

C. State Transporter's ID

D. Transporter's Phone: 515-244-7357

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
A-TEC RECYCLING, INC.
5745 NE 17TH STREET
DES MOINES, IA 50313

10. US EPA ID Number: A 0 0 0 0 0 1 0 9 8 2 7

G. State Facility's ID

H. Facility's Phone: 515-244-7357

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, 9, UN2315, PGII (EPA Waste Code PCB-2) (NAERG-171)	X	001	DM	00041	K	
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

IN THE EVENT OF A CHEMICAL SPILL REFER TO 96NAERG-171

EMERGENCY TELEPHONE NUMBER 800-551-4912.

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.

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GENERATOR

Printed/Typed Name: X Joseph L. Bartholomew

Signature: X Joseph L. Bartholomew

Month Day Year: 1 2 1 1 9 2

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Richard Douglas

Signature: Richard Douglas

Month Day Year: 1 2 0 1 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

TRANSPORTER

19. Discrepancy Indication Space: Item 8a is a field estimate Actual measured weight is 36 K.G.

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Rich Young

Signature: Rich Young

Month Day Year: 1 2 1 3 0 2

FACILITY

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

A-TEC RECYCLING INC.

BILL OF LADING

021211-16120

CUSTOMER

CLIMAX MOLYBDENUM COMPANY
ATTN. ACCTS PAYABLE
PO BOX 220
FORT MADISON IA 52627

GENERATOR

CLIMAX MOLYBDENUM COMPANY
3098 HIGHWAY 61 SOUTH
FORT MADISON IA 52627

SHIPPING OR P.O.#	DATE		PICKUP		DELIVERED
12428	12/11/02	✓			

QUANTITY	LAMP TYPE
	Fluorescent ≤ 4' and Compacts
	Fluorescent > 4'
	All Shielded Fluorescent
	U Shape and Circular
	High Intensity Discharge
Est:_____Lbs	Crushed Lamps (Act_____Lbs.)
	Other_____
UNITS	NOTES

DRUM				
DROP	4'(190)__/__	4'(80)_____	8'__/__	Steel_____
PICKUP	4'(190)__/__	4'(80)_____	8'__/__	Steel__/__
RECEIVED	A P	DATE		
PROCESSED	A P	DATE		

COMPUTERS

DRUM	TYPE	EST(Lbs)	ACT(Lbs)

QUANTITY PCB	QUANTITY Non PCB	BALLASTS
	5	Ballasts (Fluorescent 4' & under)
2	1	Ballasts (Fluorescent over 4')
		HID Ballasts
		Capacitors
	3	Other Items
TOTAL UNITS		NOTES

BATTERIES

DRUM	TYPE	EST(Lbs)	ACT(Lbs)
	TOTAL UNITS RECEIVED		

NOTES

RECEIVED, subject to the classification and regulations in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (exact contents of packages unknown).
RECEIVED, subject to the terms and conditions of A-TEC Recycling, Inc. Service Agreement or Contract for Services. All lamps to be processed for recycling within 24 hours after receipt at the destination A-TEC Recycling Facility as indicated in the Service Agreement or Contract for Services.

To certify that the above described lamps/ballasts were picked up or delivered as noted for recycling. The packages contain the materials as described and do not contain any non-described material.

Customer or Generator Authorized
By:_____
Date:_____ EPA#: IA0000109827
A-TEC Recycling, Inc. Accepted By:_____

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 11577
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
P O BOX 220 2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319)463-7151

A. State Manifest Document Number
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN CORP.
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00024	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 94743356 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

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GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
KEN DAUGH	Ken Daugh	01 16 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Johnnie Ferrel	John Ferrel	01 16 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

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	Signature	Date (Month Day Year)
CHRIS JENYNS		01 16 98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

6

ORIGINAL-RETURN TO GENERATOR

Reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM. REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
IAD 000222653	61083		

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
P O BOX 220
FORT MADISON IA 52627
2598 HWY 61 SOUTH

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN CORP.
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID

7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone 800 669-5740
E. State Transporter's ID

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT. IA 52806
10. US EPA ID Number: IAD 098027592
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 319 386-3024

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00024	G	NONE
b.							
c.							
d.							

RECEIVED FEB 1 [illegible]

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
MFST R/T# 94894009 5-047-01-5062
SKDOT# A: 557 B: C: D:

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: Rick Ekle — Signature — Date: Month 02 Day 10 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Johnnie Ferrel — Signature — Date: Month 02 Day 10 Year 98

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

FACILITY

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: Chris Jevyak — Signature — Date: Month 02 Day 10 Year 98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

6

ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 | Manifest Document No. 31653 | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
P O BOX 220 2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN CORP. | 6. US EPA ID Number: ILD 984908202

C. State Transporter's ID

D. Transporter's Phone ~~800 669-5740~~

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

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00025	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95021637 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
KEN OUGH	Ken Ough	03 10 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Johnnie Ferrel	Johnnie Ferrel	03 10 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (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	Signature	Date (Month Day Year)
CHRIS JEVYAK		03 10 98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

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ORIGINAL-RETURN TO GENERATOR

GENERATOR

TRANSPORTER

FACILITY

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 20479
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number:
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY KLEEN CORP
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID:
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID:
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00025	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MPST R.T# 95156146 5-047-01-5061
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
KEN OUGH	Ken Ough	04 07 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Johnnie Ferrel	Johnnie Ferrel	04 07 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JEVYN		04 08 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

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ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 31172
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY KLEEN CORP
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00025	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

RECEIVED MAY - 8 1998

15. Special Handling Instructions and Additional Information
MFST R/T# 95283905 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

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Printed/Typed Name: BRIAN J. MEIEROTTO
Signature: Brian J. Meierotto
Date: Month 05 Day 05 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Johnnie Ferrel
Signature: Johnnie Ferrel
Date: Month 05 Day 05 Year 98

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

FACILITY

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: TIM PRICE
Signature
Date: Month 05 Day 05 Year 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290 6

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 28954
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number:
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY KLEEN CORP
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID:
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID:
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID,N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00017	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95346146 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

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GENERATOR

Printed/Typed Name: RICKEKIE
Signature:
Date: Month 05 Day 17 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Johnnie Ferrel
Signature:
Date: Month 05 Day 18 Year 98

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

FACILITY

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: CHRIS JOVYAK
Signature:
Date: Month 05 Day 20 Year 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 51332
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY KLEEN CORP
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	0001	DM	00020 G		NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95411723 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
KEN OUGH	Ken Ough	06 02 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
James Hill	Jim Hill	06 02 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JESSAK	Chris Jessak	06 02 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD 000222653
Manifest Document No.: 85056
2. Page 1 of

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

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY KLEEN CORP
6. US EPA ID Number: ILD 984908202

C. State Transporter's ID

D. Transporter's Phone: 800 669-5740

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

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN CORP.
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	002	DM	00024	G	NONE
b.							
c.							
d.							

RECEIVED JUL -6 1998 CLIMAX

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95621203 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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: KEN OUGH
Signature: Ken Ough
Date: Month 06 Day 30 Year 98

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Johnnie Ferrel
Signature: [signature]
Date: Month 06 Day 30 Year 98

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

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: CHRIS JEVYAK
Signature: [signature]
Month 06 Day 30 Year 98

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

6

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

...223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
IAD 000222653	47434		

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID 9190019999

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID / D. Transporter's Phone
SAFETY-KLEEN CORP.	ILD 984908202	800 669-5740
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID / F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number
IAD 098027592

G. State Facility's ID

H. Facility's Phone 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID,N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	002	DM	00023	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95752732 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
KEN OUGH	Ken Ough	07 28 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Johnnie Ferrel	Johnnie Ferrel	07 28 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JENJAK	Chris Jenjak	07 29 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290 6

ORIGINAL-RETURN TO GENERATOR

GENERATOR

TRANSPORTER

FACILITY

Reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 95538
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2596 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone ( )

A. State Manifest Document Number
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN CORP
6. US EPA ID Number: ILD 984906802
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3027 WEST 76RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 093002793
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993, PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)		001	DM	00026	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
EMERGENCY RESP 800-468-1760 24 HR. IF UNDELIVERABLE RETURN TO GENERATOR
PP# 595538

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.

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Printed/Typed Name	Signature	Date (Month Day Year)
DAVE WOOLLEY	Dave R Woolley	08 27 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Kite	Kevin Kite	08 27 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JEVYAK	Chris Jevyak	08 28 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 26745
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN CORP.
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00014	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 95953878 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP#26745 SKDOT# A: 557 B: C: D:

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.

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Printed/Typed Name	Signature	Date (Month Day Year)
DAVE Woodley	Dave Woodley	09 09 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Kite		09 09 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

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	Signature	Date (Month Day Year)
CHRIS JEVYAK		09 10 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290 6

ORIGINAL-RETURN TO GENERATOR

GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 32284
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number:
B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ~~IAD 098027592~~ ILD 984908202
C. State Transporter's ID:
D. Transporter's Phone: ~~319 386-3024~~

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: ~~ILD 984908202~~ IAD098027592
G. State Facility's ID:
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00024	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96017104 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP# 232284
SKDOT# A: 557 B: C: D:

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: Frank Mason
Signature: Frank S. Mason
Date: Month 09 Day 21 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kevin Kite
Signature:
Date: Month 09 Day 21 Year 98

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

FACILITY

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: CHRIS JENYNK
Signature:
Date: Month 09 Day 22 Year 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

STATE OF ILLINOIS

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.

5-047-01 NON HAZARDOUS

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH EPA Form 8700-22 (6-89) Form Approved. OMB No. 2050-0039

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653 | Manifest Document No. 32830 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address / Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319)463-7151

A. Illinois Manifest Document Number: IL 8283394 MANIFEST FEE PAID

B. Illinois Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC | 6. US EPA ID Number: ILD 984908202

C. Illinois Transporter's ID: UPW0151288OH

D. (800) 669-5740 Transporter's Phone

7. Transporter 2 Company Name: SAFETY-KLEEN (TG), INC. | 8. US EPA ID Number: SCD 987574647

E. Illinois Transporter's ID: UPW0203954OH

F. (803) 798-2993 Transporter's Phone

9. Designated Facility Name and Site Address 000654
SAFETY-KLEEN SYSTEMS, INC
633 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number: ILD 980613913

G. Illinois Facility's ID: 0310690006

H. Facility's Phone: 708 849-4850

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. USED OIL AND ABSORBENT MIXTURE (NOT USDOT HAZARDOUS MATERIAL)	001	DM	00055	G	EPA HW Number X ~~XIICNE~~ H Authorization Number
b.					EPA HW Number X X Authorization Number
c.					EPA HW Number X X Authorization Number
d.					EPA HW Number X X Authorization Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14: M061

15. Special Handling Instructions and Additional Information: MFST R/T# 96100782 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PP#32830 SKDOT# A: 1003 B: C: D:

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, and Illinois regulations.

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Printed/Typed Name	Signature	DATE Month Day Year
Rick Ekle		10 06 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name: Kevin Cole	Signature	DATE Month Day Year: 10 06 98
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name: Dave Carlile	Signature	DATE Month Day Year: 10 12 98

FACILITY

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	Signature	DATE Month Day Year
ESTHER MIKULA		10 12 98

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

3801788-8

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 43698
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID: 9190019999

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00023	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96161143 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP# 9/13/98 SKDOT# A: 557 B: C: D:

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GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
DAVE Woodley	Dave Woodley	10 22 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Ithe		10 22 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space
LINE 13A S/B 00023

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JEWYAK		10 23 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290 6

ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to vary from 15 minutes to 1 hour per response, with an average of 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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5-047-01

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Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 55978
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00026	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96304936 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP#855978 SKDOT# A: 557 B: C: D:

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	Printed/Typed Name	Signature	Date (Month Day Year)
GENERATOR	DAVE Woodley	Dave Woodley	11 19 98
TRANSPORTER 1	17. Transporter 1 Acknowledgement of Receipt of Materials: Kevin Kite		11 19 98
TRANSPORTER 2	18. Transporter 2 Acknowledgement of Receipt of Materials		

19. Discrepancy Indication Space

FACILITY — Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JENYSEK		11 20 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

Reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No. IAD000225653

Manifest Document No. 25677

2. Page 1 of

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

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC

6. US EPA ID Number: ILD 984908202

C. State Transporter's ID

D. Transporter's Phone: 800 669 5740

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00024	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96438439 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP#325677 SKDOT# A: 557 B: C: D:

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.

GENERATOR

Printed/Typed Name: DAVE WOODLEY | Signature: Dave Woodley | Date: Month 12 Day 16 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Kevin Kite | Signature: [signature] | Date: Month 12 Day 16 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space
Generator Signed Line 20 therror

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name: CHRIS JENYAK | Signature: [signature] | Date: Month 12 Day 17 Year 98

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290

6

ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 28992
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone ( ) 319 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 800 669-5740

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00015	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96500908 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP #528992 SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
GENERATOR	Dave Woodley	Dave Woodley	12 28 98
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials: Kevin Kite		12 28 98
	18. Transporter 2 Acknowledgement of Receipt of Materials		
FACILITY	19. Discrepancy Indication Space		
	Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name: CHRIS JEVYAK	Signature: Chris Jevyak	12 29 98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

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ORIGINAL-RETURN TO GENERATOR

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 01581
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: ~~319 386-3024~~

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00026	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 96578823 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP# 701581 SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
DAVE WOODLEY	Dave Woodley	01/14/98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Cite	[signature]	01/14/98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

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	Signature	Date (Month Day Year)
CHRIS JEVNIK	[signature]	01/15/98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

ORIGINAL-RETURN TO GENERATOR

SAFETY-KLEEN CORP.

90290

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Reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 69633
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00026	G	NONE
b.							
c.							
d.							

GENERATOR

RECEIVED
FEB 12 1999
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above.

15. Special Handling Instructions and Additional Information
MFST R/T# 96719979 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PO #869633
SKDOT# A: 557 B: C: D:

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: Deane Scott — Signature: Deane Scott — Date: Month 02 Day 08 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ~~Dave Woodley~~ Kevin Kite — Signature: Kevin Kite ~~Dave Woodley~~ — Date: Month 02 Day 08 Year 99

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

FACILITY

19. Discrepancy Indication Space
ITEM 17 signed by generator in error.

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: Tim Rice — Signature — Date: Month 02 Day 10 Year 99

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

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ORIGINAL-RETURN TO GENERATOR

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD000222693 | Manifest Document No. 77966 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00015	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 97066374 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP# 77966 SKDOT# A: 557 B: C: D:

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: BRIAN J. MEIEROTTO | Signature: Brian J. Meierotto | Date: Month 04 Day 19 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kevin Cite | Signature | Date: Month 04 Day 19 Year 99

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

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: CHRIS JEVYAK | Signature: Chris Jevyak | Date: Month 04 Day 21 Year 99

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

90290 6

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No. IAD000222653 — Manifest Document No. 55340 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC — 6. US EPA ID Number: ILD 984908202

C. State Transporter's ID

D. Transporter's Phone 319 386-3024

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

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806 — 10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	003	DM	00073	G	NONE
b.							
c.							
d.							

RECEIVED MAY 10 1999 CLIMAX MOLYBDENUM COMPANY FORT MADISON, IOWA

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 97158606 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PPH55340 SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
GENERATOR	Frank S. Mason	Frank S. Mason	05 06 99
17. Transporter 1 Acknowledgement of Receipt of Materials	Kevin Kite		05 06 99
18. Transporter 2 Acknowledgement of Receipt of Materials			
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.	CHRIS JEVYAK		05 07 99

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

ORIGINAL-RETURN TO GENERATOR

90290

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Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

SAFETY-KLEEN CORP. P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761 FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE.
STATE PRESCRIBED FORM State Form LPC 62 8/81 IL532-0610
5-047-01
NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH **EPA Form 8700-22 (6-89)** Form Approved. OMB No. 2050-0039

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No. IAD 000222653	Manifest Document No. 98726	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address Location if Different:
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. Illinois Manifest Document Number IL 8381530 MANIFEST FEE PAID
B. Generator's IL ID Number [illegible]
C. Illinois Transporter's ID UPW0151288OH
D. (800) 669-5740 Transporter's Phone

5. Transporter 1 Company Name SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number ILD 984908202

7. Transporter 2 Company Name SAFETY-KLEEN (TG), INC.
8. US EPA ID Number SCD 987574647

E. Illinois Transporter's ID UPW0203954OH
(800) 998-2993 Transporter's Phone

9. Designated Facility Name and Site Address 000654
SAFETY-KLEEN SYSTEMS, INC
633 E 138TH ST
DOLTON, IL 60419
10. US EPA ID Number ILD 980613913

G. Facility's IL ID Number 0310690006
H. Facility's Phone 708 849-4850

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. USED OIL AND ABSORBENT MIXTURE (NOT USDOT HAZARDOUS MATERIAL)	001	DM	00055	G	EPA HW Number NONE
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14
M061

15. Special Handling Instructions and Additional Information
MFST R/T# 96370904 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
PP# 598726 SKDOT# A: 1003 B: C: D:

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, and Illinois 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.

GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
Frank S. Mason	Frank S. Mason	05 06 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name: Kevin Cite	Signature	Date: 05 06 99
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name: FRED BARTH	Signature	Date: 5 12 99

FACILITY

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	Signature	Date (Month Day Year)
ESTHER MIKULA	Esther Mikula	05 12 99

This Agency is authorized to require, pursuant to Illinois Revised Statutes 1989, Chapter 111½ Sections 1004 and 102, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

A)3801788/421488 COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-8802 or 202/426-2675.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 64390
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	003	DM	00074	G	NONE
b.						
c.						
d. AUG - 2 1999						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 97503500 5-047-01-5062
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
PP#64390 SKDOT# A: 557 B: C: D:

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.

GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
Doug Woodley		07 27 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Kevin Kirk		07 27 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
CHRIS JENYSH		07 29 99

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290

6

Public reporting burden for this collection of information is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 05640
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
SAFETY-KLEEN SYSTEMS, INC 504701
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	003	DM	00074	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. MFST R/T# 97931412 5-047-01-5062
SKDOT# A: 557 B: C: D:

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.

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GENERATOR

Printed/Typed Name: Dave Woodley
Signature: Dave Woodley
Date: Month 10 Day 22 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Dennis Woods
Signature:
Date: Month 10 Day 22 Year 99

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

FACILITY

19. Discrepancy Indication Space

RECEIVED OCT 27 1999 CLIMAX MOLYBDENUM COMPANY FORT MADISON, IOWA

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: Chris Kruck
Signature:
Date: Month 10 Day 25 Year 99

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290

6

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. Estimated burden includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETING THIS FORM

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 16903
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202

C. State Transporter's ID

D. Transporter's Phone: 319 386-3024

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

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
SAFETY-KLEEN SYSTEMS, INC 504701
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone: 319 386-3024

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	001	DM	00015	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 98113223 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

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Printed/Typed Name: Steve Ringold
Signature: [signature]
Date: Month 11 Day 29 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Dennis Woods
Signature: [signature]
Date: Month 11 Day 29 Year 99

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

FACILITY

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: CHRIS Stryk
Signature: [signature]
Month 12 Day 01 Year 99

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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

Form Approved. OMB No. 2050-0039 Expires 9-30-9[illegible]

UNIFORM [illegible] WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 65111
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	X	001	DM	00017	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T# 98692950 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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GENERATOR — Printed/Typed Name: STEVE Ringold — Signature: [signature] — Date: Month 03 Day 21 Year 00

17. Transporter 1 Acknowledgement of Receipt of Materials

TRANSPORTER — Printed/Typed Name: Dennis Woods — Signature: [signature] — Date: Month 03 Day 21 Year 00

18. Transporter 2 Acknowledgement of Receipt of Materials

TRANSPORTER — Printed/Typed Name — Signature — Date: 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.

FACILITY — Printed/Typed Name: CHRIS JEYNES — Signature: [signature] — Date: Month 03 Day 23 Year 00

A Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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

Form Approved. OMB No. 2050-0039 Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD000222653 | Manifest Document No. 18133 | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE
FORT MADISON PO BOX 220 IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC.
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID

7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone 319-386-3024
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	003	DM	00075	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

APR 10 2000

CLIMAX SECURITY

15. Special Handling Instructions and Additional Information
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. MPST R/T# 98759987 0000-2230-13
SKDOT# A: 557 B: C: D:

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.

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GENERATOR

Printed/Typed Name: Doug Woodley | Signature: Doug Woodley | Date: Month 04 Day 05 Year 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Dennis Woods | Signature | Date: Month 04 Day 05 Year 00

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

FACILITY

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: CHRIS JEVNIK | Signature | Date: Month 04 Day 06 Year 00

Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

INSTRUCTIONS FOR COMPLETION OF THIS FORM

...reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM 223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

No. 3155-2

Date: 5/18/00

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2589 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number 10179 **Received by us on** 5/12/00

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-1

Barbara J. Kerkin / EOG

Authorized Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I A D 0 0 0 2 2 2 6 5 3	1.0.1.7.9	

GENERATOR

3. Generator's Name and Mailing Address: Climax Molybdenum
2598 Hwy 61
Ft. Madison, IA 52627

10179

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T·X·R·0·0·0·0·3·0·5·9·3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	8. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee, WI 53223	W·I·D·9·8·8·5·8·0·0·5·6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	2	DM	110	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
A: 3155-1,2000647 Parts Washer/Cleaner/Molybdenum/Absorbents
B:
C:

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	05	11	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Cedric Solie	Cedric Solie	05	11	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Martin W. Schmit	Martin W. Schmit	05	12	00

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I A D 0 0 0 2 2 2 6 5 3	1 0 1 7 9	

3. Generator's Name and Mailing Address: Climax Molybdenum
2598 Hwy 61
Ft. Madison. IA 52627

10179

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T X R 0 0 0 0 3 0 5 9 3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W.,Hemlock Street Milwaukee. WI 53223	W I D 9 8 8 5 8 0 0 5 6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	2	D M	110	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
A: 3155-1,2000647 Parts Washer/Cleaner/Molybdenum/Absorbents
B:
C:
D:

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk. IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	05	11	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Carol Sale	Carol Sale			

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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

EOG Environmental, Inc.
5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223
(414) 353-1156 1-800-234-1156 WID988580056

WS Number: _____
Approval #: _____

A. Generator Name: Climax Molybdenum Co. Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft. Madison, IA 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Transportatio Coordinator
Telephone: (319) 463-7151 Ext. _____ FAX #: (319) 463-7159 Phone Number: 319-524-8273 FAX #: 319-524-9019
EPA ID: IAD000222653 This profile sheet was completed using: ■ General Knowledge □ Analysis (attached) ■ MSDS □ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Parts Washer/Cleaner/Molybdenum (iv) Sulfide/Absorbents
Process Generating Waste: Spill Cleanup
Color: _____ Odor: _____ □ None ■ Mild □ Strong ■ Single Layer □ Double Layer □ Multi-Layer
Free Phases: ____ ■ Liquid 1-2 % □ Powder _____ % ■ Solid 98-99 % □ Sludge _____ %

C. RCRA AND DOT INFORMATION
Is this a USEPA Hazardous Waste? □ Yes ■ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? □ Yes ■ No Anticipated Annual Volume: 55 / Units: Gal.
Proper Shipping Name: Non-Regulated Material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1x55g
Method of Shipment: □ Bulk Liquid □ Bulk Solid ■ Drum Container Type: DM Size: 55

D. SPECIAL HANDLING INSTRUCTIONS
If Special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? □ Yes ■ No

E. METALS (Indicate in parts per million [ppm] if this waste contains any of the following using): □ TCLP ■ Generator Knowledge □ TOTAL

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	■ <5 □ <500		Mercury	■ <0.2 □ <20		Nickel	■ <5 □ <134	
Barium	■ <100		Selenium	■ <1 □ <100		Thallium	■ <5 □ <130	
Cadmium	■ <1 □ <100		Silver	■ <5		Zinc	■ <5	
Chromium	■ <5		Chromium-Hex	■ <5 □ <500				
Lead	■ <5 □ <500		Copper	■ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	□ <0.8	□ 0.8-1.0	□ 1.0-1.2	□ 1.2-1.4	■ 1.4-1.7	□ >1.7 Actual:
Total Suspended Solids:		□ 0.5	□ 0.5-2.0	□ 2.0-5.0	□ 5.0-20	■ >20 Actual:
pH:	□ <2	□ 2-6	■ 6-8	□ 8-10	□ 10-12.5	□ >12.5 Actual:
BTU's:	□ <1	■ 1-4	□ 4-8	□ 8-12	□ 12-16	Actual:
Flash Point (Closed Cup):		□ <73°F	□ 73-140°F	□ >140-200°F	■ >200°F	Actual:
Sulfur (% WT):		■ <0.5	□ 0.5-2.0	□ 2-5	□ >5.0	Actual:

G. HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS
Reactivity: ■ None □ Explosive □ Pyrophoric □ Shock Sensitive □ Water Reactive □ Etiological □ Radioactive □ Acutely Hazardous Waste
Viscosity: □ Low ■ Medium □ High Are TC Codes present? □ Yes ■ No (If yes, please list in USEPA Waste Code Section).
Halogens: □ 0 % Chlorine □ 0 % Fluorine □ 0 % Bromine □ 0 % Iodine
Cyanides (ppm) 0 PCB's (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm): 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Cloth Pigs	95-97%		%
For Best Sea Wash	1-2 %		%
Cleaner	1-2 %		%
Molybdenum	1-2 %		%
	%		%
	%		%

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to assist EOG Environmental, Inc., as Generator's agent for disposal of waste Accordingly Generator specifically authorizes officers and/or employees of EOG Environmental Inc., to sign forms and/or contracts on behalf of Generator. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above manifest sheet. The Generator specifically acknowledges that it has carefully reviewed the above manifest sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X [signature] X Environmental Mgr May 2, 2000
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

Post-it Fax Note 7671 | Date 4/28/06 | # of pages ▶ 2
To Richard Albert | From E.A. Forbes
Co./Dept. | Co.
Phone # | Phone #
Fax # 318-463-7315 | Fax #

Material Safety Data Sheet

ForBest™ SeaWash®-700

pH-Neutral Parts Washer Formulation

Revision: 7 Date: January, 1999

Hazardous Material Identification Rating:
Fire - 0 Health - 0 Reactivity - 0

SECTION 1: PRODUCT IDENTIFICATION

Identity (Trade Name):	*ForBest* **SeaWash-700** Aqueous Cleaning Solution
Part Number:	SW-700
Family / Chemical Name:	Non-Ionic Surfactants with Rust Inhibitor
Chemical Formulation:	Proprietary
Product Use:	Cleaning and degreasing of metal parts.
Exclusive Distributor:	ForBest Cleaning Solutions, Inc. LBTC, S. Stadium Dr., #124, Baton Rouge, LA 70803-6100 Phone: (225) 334-6990 FAX: (225) 334-3441
Manufacturer:	Warren Chemical Corp. 25463 Hwy. 190, Robert, LA 70455
Emergency Phone No.:	**(504) 542-8985 (Warren Chemical Corp.)**

SECTION 2: HAZARDOUS INGREDIENTS

None per OSHA 29 CFR 1910.1000 & OSHA 29 CFR 1910.1200

SECTION 3: PHYSICAL DATA (Concentrate

Specific Gravity:	1.083	**Form:**	Liquid
Appearance:	Light Golden	**pH:**	6.8 - 7.5
Odor:	Slight Rose	**Flash Point:**	None
Solubility in Water:	Infinite	**Boiling Point:**	210 °F

SECTION 4: FIRE AND EXPLOSION DATA

ForBest **SeaWash-700** is non-flammable and will not support combustion.

SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with running water.
Ingestion: Seek medical attention.
Skin: Flush with cool running water.
Inhalation: Leave the area for fresh air.

SECTION 6: PERSONAL PROTECTIVE DATA

Required Protective Equipment: None
Recommended Protective Equipment: Splash-proof goggles and gloves (common sense dictates that protective wear is appropriate when there is prolonged contact on a continuous basis).

SECTION 7: TOXICOLOGICAL PROPERTIES

None Known

SECTION 8: REACTIVITY DATA

Hazardous Decomposition Products:	None Known
Stability:	Stable
Materials to Avoid:	None Known
Conditions to Avoid:	None Known
Hazardous Ploymerization:	None

SECTION 9: SPILL AND DISPOSAL MEASURES

Spill and Recovery: *ForBest* **SeaWash-700** is biodegradable. If spilled, flush area thoroughly with water.
Waste Disposal Method: *ForBest* **SeaWash-700** is not regulated under any federal regulations as a toxic or hazardous material (see below). When used in *ForBest* Integrated Parts Cleaning (IPC™) Systems in typical parts cleaning applications, the solution is biologically cleaned in the system and never requires disposal; however, if it ever becomes necessary to dispose of spent solution, foreign, potentially-regulated contaminants from the parts cleaning process are introduced to the system in the cleaning process and applicable local, state, and federal regulations pertaining to characterization and disposal should be adhered to.

SECTION 10: TRANSPORATION DATA

DOT Class:	Non-Regulated
Hazard Class:	None
UN / UNA Number:	None
IMO / IATA:	Surfactant

SECTION 11: REGULATORY INFORMATION

Federal Regulations

29 CFR 1910.1000:	None
CERCLA/SUPERFUND 40 CFR 117, 302, 304:	Notification of spills is *not* required
SARA/SUPERFUND Amendments and Reauthorization Act of 1986 (Title III - Sections 302, 311, 312, 313):	Contains no ingredients listed in Appendix A per Section 302. Not hazardous under Sections 311 and 312. Not reportable under Section 313.
RCRA:	Not Applicable
Total Toxic Organics:	None Per TTO List

Local Regulations

SCAQMD Rule 1171:	Certified by SCAQMD as a Clean Air Solvent and therefore exempt from provisions of the Rule.

No representations or warranties either expressed or implied of fitness for a particular purpose or any other nature are made here with respect to the information contained herein on the chemical listed above. All information presented in this document has been provided by the manufacturer, Warren Chemical Corp., who holds the formulation as a proprietary trade secret. As such, any and all claims made in this regard are by Warren Chemical Corp. exclusively.

©1999 ForBest Cleaning Solutions, Inc.

Print Date: 4/12/2000
Revision Date: Original.
Version: 0

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Section 1 - Chemical Product and Company Identification

MSDS Name:

Molybdenum(iv) sulfide, 98.5%

Catalog Numbers:

21.578.44, AC215780000, AC215780050, AC215781000, AC215785000, 215780050

Synonyms:

Molybdenum disulfide; DAG 325; Molykote; Mopol M; Mopol S

Company Identification:

Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel
Belgium

Company Phone Number:

0032(0)14575211

Emergency Phone Number:

0032(0)14575299

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ELINCS
1317-33-5	Molybdenum(IV) sulfide	98.5	215-263-9

Hazard Symbols:
Risk Phrases:

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: dark gray
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: none.

Potential Health Effects

Eye:

Dust may cause mechanical irritation. The toxicological properties of this material have not been fully investigated.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Skin:

May cause skin irritation. The toxicological properties of this material have not been fully investigated.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

Dust is irritating to the respiratory tract. The toxicological properties of this substance have not been fully investigated.

Chronic:

No information found.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

NFPA Rating:

(estimated) Health: ; Flammability: ; Reactivity:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

ills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Molybdenum(IV) sulfide	soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds, as Mo: 10 mg/m3 TWA (listed under ** no name **)	as Mo: no established RELs - see Appendix D (listed under ** no name **) as Mo: 5000 mg/m3 IDLH (Molybdenum soluble compounds: 1000 mg/m3 IDLH) (listed under ** no name **)	soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds (total dust), as Mo: 15 mg/m3 TWA (listed under ** no name **)

OSHA Vacated PELs

Molybdenum(IV) sulfide soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds (total dust), as Mo: (listed under ** no name **)

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: dark gray
Odor: None reported.
pH: No information found.
Vapor Pressure: No information found.
Vapor Density: 5.51
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: 2375°C (4,307.00°F)
Autoignition Temperature: No information found.
Explosion Limits: Lower: Upper:
Flash Point: No information found.
Decomposition Temperature: No information found.
Solubility in water: Soluable in aqua regia and sulfuric acid
Specific Gravity/Density: No information found.
Molecular Formula: MoS2
Molecular Weight 160.07

Section 10 - Stability and Reactivity

Chemical Stability:
Stability unknown.
Conditions to Avoid:
Incompatible materials, dust generation, strong oxidants.
Incompatibilities with Other Materials
strong oxidizing agents, hydrogen peroxides, potassium nitrate.
Hazardous Decomposition Products
Oxides of sulfur, hydrogen sulfide, oxides of molybdenum.
Hazardous Polymerization
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 1317-33-5: QA4697000.
LD50/LC50:
CAS# 1317-33-5:
No information found.
Carcinogenicity:
CAS# 1317-33-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive:
No information available.

Mutagenicity
No information found.

Neurotoxicity
No information found.

Other:
See actual entry in RTECS for complete information.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA P Series Wastes
None of the components are on this list.

RCRA U Series Wastes
None of the components are on this list.

Section 14 - Transport Information

	US DOT	Canadian TDG
Shipping Name:	No information found.	No information found.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US Federal

TSCA
CAS# 1317-33-5 is listed on the TSCA Inventory.

Health and Safety Reporting List
None of the components are on this list.

Chemical Test Rules
None of the components are on this list.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

SARA Reportable Quantities (RQ)

None of the components are on this list.

SARA Threshold Planning Quantities (TPQ)

None of the components are on this list.

SARA Hazard Categories

None of the components are on this list.

CERCLA/SARA Section 313

None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

Molybdenum(IV) sulfide can be found on the following state Right-to-Know lists: California, (listed as ** undefined **), New Jersey, Florida, (listed as ** undefined **), Pennsylvania, (listed as ** undefined **), Minnesota, (listed as ** undefined **), Massachusetts.

California Regulations

CAS# 1317-33-5: No information found.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols:
Risk Phrases:
Safety Phrases:
S 22 Do not breathe dust.
S 24/25 Avoid contact with skin and eyes.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 37 Wear suitable gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 1317-33-5: 0

United Kingdom Occupational Exposure Limits

CAS# 1317-33-5: OES-United Kingdom, STEL (listed as ** undefined **): soluble compounds, as Mo: 10 mg/m3 STEL; insoluble compounds, as Mo: 20 mg/m3 ST

Canadian DSL/NDSL

CAS# 1317-33-5 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product has a WHMIS classification of Not controlled..

Canada Ingredient Disclosure List

CAS# 1317-33-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

Section 16 - Other Information

MSDS Creation Date: September 9, 1998
Revision Date: Original. Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

MATERIAL SAFETY DATA SHEET

HMIS Rating: Health 1 Flammability 0 Reactivity 0

IDENTITY (As Used on Label and List)
HANDI-WAY SPRAY CLEANER
C-1975 & C-2000

Note: Blank Spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name	Handi-Clean Products, Inc	**Emergency Telephone Number**	(336) 292-3083 After 5:00 p.m. (336) 454-3662
Address:	301 Swing Road Greensboro, NC 27409	**Telephone Number for Information**	(336) 292-3083
		Date Prepared	7-23-98

Section II - Hazardous Ingredients/Identity Information

	CAS NO.	OSHA PEL	ACGIH TLV	% (optional)
Isopropyl Alcohol	67-63-0	10mg/m3	400ppm	
Sodium Metasilicate	6834-92-0	10mg/m3		
Sodium Tetraborate Decohydrate	1303-96-4	5mg/m3		

Section III - Physical/Chemical Characteristics (ON CONCENTRATE)

Boiling Point Approx	209°F	**Specific Gravity** (H2O = 1)	1.035	**Appearance**	Green Liquid
Vapor Pressure (mm Hg.)	25.8	**Evaporation Rate**		**Odor**	Sassafrass
Vapor Density (AIR = 1)@20°C	1.22	**(Butyl Acetate = 1)**	N.D.	**Solubility in Water**	Complete

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) None at Boil | **Flammable Limits** A.I. 462°F | **LEL** 2.1 | **UEL** 10.8

Extinguishing Media: N.A.

Special Fire Fighting Procedures: N.A.

Unusual Fire and Explosion Hazards: N.A.

Section V - Reactivity Data

Stability: Stable [X] Unstable [ ] **Conditions to Avoid** None

Incompatibility (Materials to Avoid) Avoid mixing with acids.

Hazardous Decomposition or Byproducts None

Hazardous Polymerization	May Occur	[ ]	Will Not Occur	[X]	Conditions to Avoid

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? X | Skin? X | Ingestion? X

Health Hazards (Acute and Chronic) Eye contact may cause irritation. Reddening of skin; Itching eyes; Dizziness

Emergency and First Aid Procedures SKIN: Wash with soap and water. EYES: Flush with water using 1% Boric Acid Solution for 15 minutes. Call physician. INGESTION: Drink large volume of water and induce vomiting. Call physician immediately. INHALATION: Remove to fresh air.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken In Case Material Is Released or Spilled: Wipe up and rinse residual down drain.

Waste Disposal Method: Dispose in accordance with local, state and federal regulations.

Precautions to Be Taken In Handling and Storing: Store in cool place away from acids and direct sunlight.

Other Precautions KEEP OUT OF REACH OF CHILDREN.

Section VIII - Control Measures

Respiratory Protection (Specify Type)	None Required	**Ventilation**	Normal
Protective Gloves	If desired	**Eye Protection**	Safety Glasses
Other Protective Clothing or Equipment	None Required		
Work/Hygienic Practices	Wash hands after using product		

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 73262
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627
4. Generator's Phone ( ) 319 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: SCR 000075150
C. State Transporter's ID
D. Transporter's Phone: 319 386-3024

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: SAFETY-KLEEN SYSTEMS, INC. 504701
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	003	DM	00075	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T#099154963 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

GENERATOR

Printed/Typed Name: DAVE WOODLEY
Signature: Dave Woodley
Date: Month 06 Day 28 Year 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Donnie Woods
Signature:
Date: Month 06 Day 28 Year 00

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

FACILITY

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: CHRIS JEWYK
Signature:
Date: Month 06 Day 30 Year 00

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

ORIGINAL-RETURN TO GENERATOR

SAFETY-KLEEN CORP.
90290 (Rev 11/98) 6

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223 U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262-20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 28398
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: SCR 000075150
C. State Transporter's ID
D. Transporter's Phone: 800 669-5840

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	001	DM	00016	G	NONE
b.						
c.						
d.						

JUL 17 2000

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T#099250819 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
STEVE RIZZO		07 13 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Dennis Woods		07 13 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
STEVE RAMSEKERS		07 14 00

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40. PART 262.20.

223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

No. 3155-4

Date: 7/28/00

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2589 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number 10191 **Received by us on** 7/28/00

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-2

Barbara Kerhin

Authorized Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I.A.D.0.0.0.2.2.2.6.5.3	1.0.1.9.1	

3. Generator's Name and Mailing Address: Climax Molybdenum
2598 Hwy 61
Ft. Madison, IA 52627

10191

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T.X.R.0.0.0.0.3.0.5.9.3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee, WI 53223	W.I.D.9.8.8.5.8.0.0.5.6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	8.	D M	440.	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
A: 3155-2, 20001058, Sand cont.w/sodium hydrosulfide solution
C:
D:

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
JOSEPH L. Bartholomew	Joseph L. Bartholomew	07	27	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Earl Ahlers	E Ahlers	07	27	00

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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Martin W. Schmit	Martin W. Schmit	07	28	00

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

EOG Environmental, Inc.

5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID98850056

A. Generator Name: Climax Molybdenum Company Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft. Madison, IA 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Trans. Coordinator
Telephone: (319) 463-7151 Ext. _____ Fax #: (319) 463-7159 Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☒ MSDS ☒ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Sand contaminated w/Sodium Hydrosulfide, Solution
Process Generating Waste: Spill
Color: dark brn. Odor: rotten egg ☐ None ☒ Mild ☐ Strong ☒ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases _____ ☐ Liquid _____ % ☐ Powder _____ % ☐ Solid _____ % ☒ Sludge 100 %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 275-550 /Units: Gal.
Proper Shipping Name: Non-regulated material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 5 X 55
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
[redacted]	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		Silver	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <500				
Lead	☒ <5 ☐ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☐ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☒ <1.4-1.7	☐ >1.7	Actual:
Total Suspended Solids:		☐ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☒ >20	Actual:
pH:	☐ <2	☐ 2-6	☐ 6-8	☐ 8-10	☒ 10-12.5	☐ >12.5	Actual:
BTU's:	☒ <1	☐ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:	
Flash Point (Closed cup):		☐ <73°F	☐ 73-140°F	☐ >140-200°F	☒ >200°F	Actual:	
Sulfer (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:	

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☐ Low ☒ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Sodium Hydrosullide, Solution	1-5	%		%		%		%
Sand	95-99	%		%		%		%
		%		%		%		%
		%		%		%		%
		%		%		%		%
		%		%		%		%

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master Sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X [redacted] Shelly Heston X Environmental Mgr X 07/17/00 7/17/2000
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No.: IAD000222653
Manifest Document No.: 88925
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: SCR 000075150
C. State Transporter's ID
D. Transporter's Phone: ~~800 669-5840~~

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD 098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	003	DM	00075	G	NONE
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T#099587863 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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.

GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
Rick Ekle	Rick Ekle	09 19 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Dennis Woods		09 19 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

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	Signature	Date (Month Day Year)
CHRIS Jevyak		09 20 00

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. IAD000222653 | Manifest Document No. 40124 | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627

4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC | 6. US EPA ID Number: SCR 000075150 | C. State Transporter's ID | D. Transporter's Phone 800 669-5840

7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806

10. US EPA ID Number: IAD 098027592

G. State Facility's ID

H. Facility's Phone: 319 386-3024

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a.	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	001	DM	00015	G	NONE
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T#099790992 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
STEVE Ringold		11 02 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Dennis Woods		11 02 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

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	Signature	Date (Month Day Year)
CHRIS Jenyon		11 03 00

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

5-047-01

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

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM ~~HAZARDOUS~~ WASTE MANIFEST

1. Generator's US EPA ID No. IAD000222653 | Manifest Document No. 09052 | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
ACCOUNTS PAYABLE PO BOX 220
FORT MADISON IA 52627
4. Generator's Phone (319) 463-7151

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN SYSTEMS, INC
6. US EPA ID Number: SCR000075150
C. State Transporter's ID
D. Transporter's Phone: 800 669-5840

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address 504701
SAFETY-KLEEN SYSTEMS, INC.
3035 WEST 73RD STREET
DAVENPORT, IA 52806
10. US EPA ID Number: IAD098027592
G. State Facility's ID
H. Facility's Phone: 319 386-3024

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (NOT USEPA HAZARDOUS WASTE)(ERG#128)	NO	004	DM	00076	G	NONE
b.						
c.						
d.						

RF MAY 22 2001 CLIMAX MOLYBDENUM COMPANY FORT MADISON, IOWA

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
MFST R/T#100290718 0000-2230-13
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SKDOT# A: 557 B: C: D:

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	Signature	Date (Month Day Year)
DAVE WOODLEY	Dave Woodley	05 16 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Dennis Woods		05 16 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (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	Signature	Date (Month Day Year)
CHRIS JKwyk		05 17 01

SAFETY-KLEEN CORP.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

ORIGINAL-RETURN TO GENERATOR

90290 (Rev 11/98) 6

GENERATOR | TRANSPORTER | FACILITY

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

No. 3155-10

Date: 8/13/01

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2598 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number 01234 **Received by us on** 7/12/01

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-3

Susan Nygaard

Authorized Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I A D 0 0 0 2 2 2 6 5 3	1 2 3 4	

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61
Ft. Madison, IA 52627

101234

4. Generator's Phone (319)463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T X R 0 0 0 0 3 0 5 9 3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee, WI 53223	W I D 9 8 8 5 8 0 0 5 6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	01	D M	55	G
b.				
c.				
d.				

GENERATOR

11. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above
3155-3, Approval # 2001493, Used Antifreeze B: C: D:	

15. Special Handling Instructions and Additional Information

Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Shelly Heston	Shelly Heston	07	11	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
LARRY BARBOUR	Larry Barbour	07	11	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Martin W. Schmit	Martin W. Schmit	07	12	01

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I A D 0 0 0 2 2 2 6 5 3	12534	

3. Generator's Name and Mailing Address: Climax Molybdenum, 2598 Hwy 61, Ft. Madison, IA 52627 — 101234

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T X R 0 0 0 0 3 0 5 9 3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee, WI 53223	W I D 9 8 8 5 8 0 0 5 6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	01	D M	55	G
b.				
c.				
d.				

11. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above
3155-3, Approval # 2001493, Used Antifreeze B: C: D:	

15. Special Handling Instructions and Additional Information

Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Shelly Heston	Shelly Heston	07	11	01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
LARRY SARBACH	Larry Barbach	07	11	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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR — TRANSPORTER — FACILITY

GENERATOR'S COPY

EOG Environmental, Inc.
5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID988500S6

A. Generator Name: Climax Molybdenum Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft Madison, Iowa 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Trans. Coordinator
Telephone: 319-463-2224 Ext. _____ Fax #: _____ Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Used Antifreeze
Process Generating Waste: Used Antifreeze
Color: _____ Odor: _____ ☐ None ☒ Mild ☐ Strong ☒ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases: _____ ☒ Liquid 100 % ☐ Powder _____ % ☐ Solid _____ % ☐ Sludge _____ %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 55-220 /Units: Gal
Proper Shipping Name: Non-Regulated Material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1 X 55 G
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55 G

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		Silver	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <500				
Lead	☒ <5 ☐ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☒ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☐ <1.4-1.7	☐ >1.7 Actual:
Total Suspended Solids:		☒ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☐ >20 Actual:
pH:	☐ <2	☐ 2-6	☒ 6-8	☐ 8-10	☐ 10-12.5	☐ >12.5 Actual:
BTU's:	☒ <1	☐ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:
Flash Point (Closed cup):		☐ <73°F	☐ 73-140°F	☐ >140-200°F	☒ >200°F	Actual:
Sulfer (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☒ Low ☐ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Anti-freeze	95-99	%		%		%		%
Oil	1-5	%		%		%		%
		%		%		%		%
		%		%		%		%
		%		%		%		%
		%		%		%		%

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master Sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X Shelly Heston X Env. Manager X 5/24/2001
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

No. 3155-11

Date: 1/29/02

CERTIFICATE OF RECYCLING/DISPOSAL

EOG ENVIRONMENTAL, INC.

This is to certify that all material from *Climax Molybdenum*

Address *2598 Hwy 61 Ft. Madison, IA 52627*

Per your Manifest Number 01253 **Received by us on** 1/24/02

Treatment Facility *EOG DISPOSAL INC.* *MILWAUKEE, WI 53223*

has been recycled/disposed of on or about the date stated above in a manner consistent with acceptable engineering standards and in compliance with applicable permits, authorizations, rules and regulations issued or set forth by State and Federal authorities.

WS/LP# 3155-3

Authorized Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I.A.D.0.0.0.2.2.2.6.5.3	1.2.5.3.	

3. Generator's Name and Mailing Address: Climax Molybdenum, 2598 Hwy 61, Ft. Madison, IA 52627 — 101253

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T.X.R.0.0.0.0.3.0.5.9.3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee. WI 53223	W.I.D.9.8.3.5.8.0.0.5.6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	001	DM	00055	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above
A: 3155-3, Approval # 2001493, Used Antifreeze B: C: D:	

15. Special Handling Instructions and Additional Information

Bill to: HEI Consultants, Inc. PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joseph L. Rathbone		01	23	02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

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 waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Martin W. Schmit	Martin W. Schmit	01	24	02

GENERATOR'S COPY

GENERATOR — TRANSPORTER — FACILITY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
I.A.D.0.0.0.2.2.2.6.5.3	12.53.	

GENERATOR

3. Generator's Name and Mailing Address: Climax Molybdenum, 2598 Hwy 61, Ft. Madison, IA 52627 — 101253

4. Generator's Phone (319)463-2224

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
System Logistics	T.X.R.0.0.0.0.3.0.5.9.3	(940)479-2033
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
EOG Disposal, Inc. 5611 W. Hemlock Street Milwaukee, WI 53223	W.I.D.9.8.8.5.8.0.0.5.6	(414) 353-1156

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	1	D.M	55	G
b.				
c.				
d.				

11. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above
A: 3155-3, Approval # 2001493, Used Antifreeze B: C: D:	

15. Special Handling Instructions and Additional Information

Bill to: HEI Consultants, Inc., PO Box 1472, Keokuk, IA 52632
Emergency Contact: EOG 414/861-1474, 584-4746.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joseph L. Bartholomew Environmental Technician	Joseph L. Bartholomew	10	23	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Jenkins	Rick Jenkins	10	23	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

ORIGINAL - RETURN TO GENERATOR

EOG Environmental, Inc.
5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID988850056

A. Generator Name: Climax Molybdenum Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft Madison, Iowa 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Trans. Coordinator
Telephone: 319-463-2224 Ext. _____ Fax #: _____ Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Used Antifreeze
Process Generating Waste: Used Antifreeze
Color: _____ Odor: _____ ☐ None ☒ Mild ☐ Strong ☒ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases _____ ☒ Liquid 100 % ☐ Powder _____ % ☐ Solid _____ % ☐ Sludge _____ %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 55-220 /Units: Gal
Proper Shipping Name: Non-Regulated Material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1 X 55 G
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55 G

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		Silver	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <500				
Lead	☒ <5 ☐ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☒ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☐ <1.4-1.7	☐ >1.7 Actual:
Total Suspended Solids:		☒ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☐ >20 Actual:
pH:	☐ <2	☐ 2-6	☒ 6-8	☐ 8-10	☐ 10-12.5	☐ >12.5 Actual:
BTU's:	☒ <1	☐ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:
Flash Point (Closed cup):		☐ <73°F	☐ 73-140°F	☐ >140-200°F	☒ >200°F	Actual:
Sulfer (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☒ Low ☐ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Anti-freeze	95-99	%		%		%		%		%	
Oil	1-5	%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master Sheet" above. In this respect EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

x Shelly Heston x Env. Manager x 5/24/2001
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

1/17/02

Climax Molybdenum
Shelly Heston
2598 Hwy 61
Ft. Madison, IA 52627

RE: Recertification

Dear Shelly Heston:

WS# **3155-3** Date of Original Profile: **5/31/01**
Name: **Used Antifreeze**

EOG Disposal, Inc. is committed to the need of our customers and to the regulatory agencies under which we operate. The EOG Disposal **Plan of Operation** requires that we recertify each of our customers waste streams on an annual basis.

Please review and sign the attached "Waste Profile Sheet" and return to us. **The Wisconsin DNR requires us to have an original signature on file.** If we do not receive a response within thirty (30) days of the date of this letter, we will also consider this waste stream to have expired.

YES, I would like to renew this profile(s) for another year.

Per 40 CFR 265.13, the characteristics of this waste(s) have not changed. I also certify that I am an employee of the generator and I am authorized to sign this recertification.

X Shelly Heston
Signature

X Manager Environmental Affairs
Title

X 1/18/02
Date

NO, I do not wish to renew this profile(s) for one more year.

I also certify that I am an employee of the generator, and I am authorized to sign this waste stream cancellation.

X _____
Signature

X _____
Title

X _____
Date

Thank you for your cooperation. If you have any questions, please contact your sales representative or call me at 1-800-234-1156.

Sincerely,

EOG ENVIRONMENTAL, INC.
EOG DISPOSAL, INC.

Susan Ingram
Approval Coordinator

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7001791

2. Page 1 of

3. Generator's Name and Mailing Address

CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON
Generator's Phone (319) 463-2224
IA 52627

5. Transporter 1 Company Name

LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	900 G 9 3 1 6 7 0	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

RECEIVED
JAN 23 1998
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: THOMAS F ANDERSON — Signature: Thomas F Anderson — Date: Month 1 Day 19 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WILLIAM E HAZLE — Signature: William E Hazle — Date: Month 1 Day 19 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: ROBIN BARNARD — Signature: Robin Barnard — Date: Month 1 Day 19 Year 98

NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST XX

1. Generator's US EPA ID No.

Manifest Document No. 7001791

2. Page 1 of

3. Generator's Name and Mailing Address

IMAX MOLYBDENUM CO
2598 HWY 61
[illegible]) IA 52627

4. Generator's Phone [illegible]

5. Transporter 1 Company Name

ENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

ENZ OIL SERVICE INC
7001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	900 S 9 3 1 6 7 0	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Thomas F Anderson	Thomas F Anderson	1	19	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hall	William E. Hall	1	19	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

NON-HAZARDOUS WASTE

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7001907

2. Page 1 of

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61

4. Generator's Phone (319) 463-2224

9191110134

5. Transporter 1 Company Name
Lenz Oil Ser.

6. US EPA ID Number

A. State Transporter's ID 0423

B. Transporter 1 Phone (309)676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Lenz Oil Ser.
3001 S W Washington
Peoria, IL. 61602

10. US EPA ID Number

E. State Facility's ID
1430650015

F. Facility's Phone
309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non Hazardous Used Oil	001	TT	750 G931	670
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Thomas E. Anderson — Signature: Thomas E. Anderson — Date: Month 2 Day 2 Year 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E. Haile — Signature: William E. Haile — Date: Month 2 Day 2 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: ROBIN BARNARD — Signature: Robin Barnard — Date: Month 2 Day 2 Year 98

NON-HAZARDOUS WASTE — GENERATOR — TRANSPORTER — FACILITY

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7001907 | 2. Page 1 of

3. Generator's Name and Mailing Address
Climax Molybdenum
2598 Hwy 61

4. Generator's Phone (319) 463-2224

9191110134

5. Transporter 1 Company Name: Lenz Oil Ser.
6. US EPA ID Number:
A. State Transporter's ID: 0423
B. Transporter 1 Phone: (309)676-0211

7. Transporter 2 Company Name:
8. US EPA ID Number:
C. State Transporter's ID:
D. Transporter 2 Phone:

9. Designated Facility Name and Site Address
Lenz Oil Ser.
2001 S W Washington
Peoria, IL. 61602
10. US EPA ID Number:
E. State Facility's ID: 1430650015
F. Facility's Phone: 309-676-0211

GENERATOR

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non Hazardous Used Oil	001	TT	750 G931	670
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Thomas E Anderson | Signature | Date: Month 2 Day 2 Year 9[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William F Hale | Signature | Date: Month 2 Day 2 Year 9[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002192

2. Page 1 of

3. Generator's Name and Mailing Address
AMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

9191110134

0423

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID IL 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL/WATER	001	FT	800 G 9 3 1	6 7 0
b.				
c.				
d.				

MAR - 2

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
WILLIAM E HAILE	William E Haile	2	16	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
WILLIAM E HAILE	William E Haile	2	16	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
ROBIN BARNARD	Robin Barnard	2	16	95

NON-HAZARDOUS WASTE

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002192

2. Page 1 of

3. Generator's Name and Mailing Address

9191101354

4. Generator's Phone

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.			500	
b.				
c.				
d.				

GENERATOR

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
		7	16	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hall	William E Hall	7	16	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

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Rev. 3/95

OIL WASTE SERVICES, INC.
FORMALLY LENZ OIL SERVICE PEORIA INC.
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 40824
Date 2-16-98
Route # 21
Trk Report # _____
Drivers Initials WEH

Federal EPA ID # ILD038411955

Hauler ID #0423

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

_____ total gals. on truck
600 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (driver circle one) TEST FEE _____
(If not get signed) TOTAL _____

General Comments: _____

Coments for Invoice: _____

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

X WEH _____
Signature

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002386

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID I 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL 175 gal	001	TT	G 9 3	6 7 0
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Thomas E. Anderson | Signature: Thomas E. Anderson | Date: Month 3 Day 16 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Perry Maxwell | Signature: Perry Maxwell | Date: Month 3 Day 16 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: ROBIN BARNARD | Signature: Robin Barnard | Date: Month 3 Day 16 Year 98

NON-HAZARDOUS WASTE

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002193

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0423

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL/WATER	001	TT	400 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

APR 1993

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Thomas E Anderson | Signature: Thomas E Anderson | Date: Month 4 Day 2 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E Haile | Signature: William E Haile | Date: Month 4 Day 2 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: ROBIN BARNARD | Signature: Robin Barnard | Date: Month 4 Day 2 Year 98

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002193

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-469-1224

5. Transporter 1 Company Name
LONE OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter 1 Phone

C. State Transporter's ID

9. Designated Facility Name and Site Address
LONE OIL SERVICE INC
2000 SW WASHINGTON ST
PEORIA IL 61602-1956

10. US EPA ID Number

D. Transporter 2 Phone

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION

		Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
GENERATOR	a. NON HAZARDOUS USED OIL/WATER			400	
	b.				
	c.				
	d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Thomas E Anderson — Signature — Date: Month 3 Day 2 Year 93

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E Hall — Signature — Date: Month 3 Day 2 Year 93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name — Signature — Date: Month Day Year

NON-HAZARDOUS WASTE

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PRINTED WITH SOY INK

Rev. 3/95

OIL WASTE SERVICES, INC.
FORMALLY LENZ OIL SERVICE PEORIA INC.
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 40484
Date 3-2-98
Route # 21
Trk Report # _____
Drivers Initials WEH
Hauler ID #0423

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Chromax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

_____ total gals. on truck
400 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE _____
(If not get signed) (driver circle one) TOTAL _____

General Comments: _____

Coments for Invoice: _____

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

X _____
Signature

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002387

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 0 4 2 3

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

309-676-0211

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID I 4 3 0 6 5 0 0 0 1 5

F. Facility's Phone
309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	800 G 9 3	6 7 0
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	5 14 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	5 14 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Pauline Lenz	Pauline Lenz	05 14 98

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002388

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID I 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1450 G 9 3	1 6 7 0
b.				
c.				
d.				

GENERATOR

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Daniel Vogel	Daniel Vogel	5	20	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hatle	William E Hatle	5	20	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
ROBIN BARNARD	Robin Barnard	5	20	98

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST XXXXX

1. Generator's US EPA ID No.

Manifest Document No. 7002388

2. Page 1 of

3. Generator's Name and Mailing Address

CLIMAX MOLYBDENUM CO
[illegible]
[illegible] IA 52627

4. Generator's Phone (319-[illegible]

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
[illegible] WASHINGTON ST
[illegible] IL [illegible]

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL			1450	
b.				
c.				
d.				

GENERATOR

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Daniel Vogel	Daniel Vogel	5	20	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hintz	William E Hintz	5	20	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

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Rev. 3/95

LENZ OIL WASTE SERVICES, INC.
CENTRAL OFFICE:
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 42982
Date 5-20-98
Route # 21
Trk Report # _____
Drivers Initials WEH

Federal EPA ID # ILD038411955

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

_____ total gals. on truck
1450 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE _____
(If not get signed) (driver circle one) TOTAL _____
General Comments: _____
_____
_____
Coments for Invoice: _____
_____
_____

This Waste Tested: ☑ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from abovenamed facility.

X Daniel Vogel
Signature

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002482

2. Page 1 of

3. Generator's Name and Mailing Address
CELTRX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name: LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

309-676-0211

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS USED OIL	001	TT	G 250	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

JUL 31 1998

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
MARILYNN R. DAVIS	Marilynn R. Davis	7 21 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
William E. Hasle	William E. Hasle	7 21 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
ROBIN BARNARD	RBL	7 21 98

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002482

2. Page 1 of

3. Generator's Name and Mailing Address
[illegible]
2398 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

5. Transporter 1 Company Name | 6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

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

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
[illegible] OIL SERVICE INC
[illegible] SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. [illegible] USED OIL			750	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
MARILYNN R. DAVIS	Marilynn R. Davis	7	21	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hale	William E Hale	7	21	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

NON-HAZARDOUS WASTE

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Rev. 3/95

LENZ OIL WASTE SERVICES, INC.
CENTRAL OFFICE:
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 44368
Date 7-21-98
Route # 21
Trk Report # _____
Drivers Initials WEH

Federal EPA ID # ILD038411955

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

_____ total gals. on truck
750 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE $30.00
(If not get signed) (driver circle one) TOTAL _____

General Comments: _____

Coments for Invoice: _____

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Marilynn R. Davis
Signature

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002481

2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

GENERATOR

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.				
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

JUL 31 1998

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name

Signature

Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name

Signature

Date: Month Day Year

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002481 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4 0 4 2 3

5. Transporter 1 Company Name: LENZ OIL SERVICE INC | 6. US EPA ID Number

A. State Transporter's ID 309-676-0211

B. Transporter 1 Phone

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

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309 676 0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS USED OIL	001	TT	750 G 9 3 1 6 7 0	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: WILLIAM E HAILE | Signature: William E Haile | Date: Month 7 Day 22 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WILLIAM E. HAILE | Signature: William E Haile | Date: Month 7 Day 22 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

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Rev. 3/95

LENZ OIL WASTE SERVICES, INC.
CENTRAL OFFICE:
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 44369
Date 7-22-98
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Chemag
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

_____ total gals. on truck
7.50 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE $30.00
(If not get signed) (driver circle one) TOTAL _____

General Comments: _____

Coments for Invoice: _____

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X WEH
Signature

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002910

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
308 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

9 1 9 1 1 1 0 1 3 4 0 4 2 3

5. Transporter 1 Company Name: LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 309-676-0211

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL	001	TT	900 6 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

NON-HAZARDOUS WASTE

15. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAZLE	William E Hazle	9 1 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAZLE	William E Hazle	9 1 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Bob White	BW	9 1 98

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002910

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 219-463-[illegible]

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
[illegible] OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
[illegible] OIL SERVICE INC
[illegible] SW WASHINGTON ST
[illegible] IL 61602-1966

10. US EPA ID Number

E. State Facility's ID [illegible]

F. Facility's Phone:

11. WASTE DESCRIPTION

	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS USED OIL			900	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: William E. Hazle
Signature: William E. Hazle
Date: Month 9 Day 1 Year 9[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E. Hazle
Signature: William E. Hazle
Date: Month 9 Day 1 Year 9[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name
Signature
Date: Month Day Year

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

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PRINTED WITH SOY INK

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OIL WASTE SERVICES, INC.
FORMALLY LENZ OIL SERVICE PEORIA INC.
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 44147
Date 9-1-98
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

_____ total gals. on truck
900 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE 20.00
(If not get signed) (driver circle one) TOTAL _____

General Comments: _____

Coments for Invoice: _____

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

x WEH
Signature

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002194

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
[illegible] HWY 61
FT MADISON IA 52627
4. Generator's Phone ([illegible]) [illegible]

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
[illegible] SW WASHINGTON ST
PEORIA IL 61602-1966

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL/WATER	001	[illegible]	1500	[illegible]
b.				
c.				
d.				

GENERATOR

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Shelli Lester	Shelli Lester	12	11	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hall	William E Hall	12	11	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Bob White	Bob White	12	11	98

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002194

2. Page 1 of

3. Generator's Name and Mailing Address
AMAX MOLYBDENUM CO
398 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0423

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID IL3065000115

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL/WATER	001	TT	1500 G 9316700	
b.				
c.				
d.				

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Shelly Heston | Signature: Shelly Heston | Date: Month 12 Day 11 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E Hale | Signature: William E Hale | Date: Month 12 Day 11 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002908

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

9 1 9 1 1 1 0 1 3 4 0 4 2 3

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 309-676-0211

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 4 3 0 6 5 0 0 1 5

F. Facility Phone 309 676 0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL	001	TT	1300 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

NON-HAZARDOUS WASTE

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Shelly Heston	Shelly Heston	1 6 99

TRANSPORTER

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAZLE	William E Hazle	1 6 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Bill White	Bill White	1 6 99

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002908

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 219-463-2224

9 1 9 1 1 1 0 1 1 1

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 3 0 5 5 [illegible]

F. Facility's Phone 30 [illegible]

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL			1300	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Shelly Heston	Shelly Heston	1	[illegible]	[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William F. Haile	William F. Haile	1	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

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OIL WASTE SERVICES, INC.
Remit To: P.O. Box 4130
Bartonville, IL 61607
Phone (309) 637-2366
Fax (309) 637-7112
Dispatch 888-OIL-WASTE

FT1125

P.U. Invoice # 40042
Date 1-6-99
Route # 21
Trk Report # _____
Drivers Initials WEN

THIS IS THE ONLY INVOICE YOU WILL RECEIVE TERMS: NET 30 DAYS

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone # 2: _____ Own/Gen. Mrg. 2: _____
☐ Generator's IL EPA ID # _____
☐ Generator's US EPA ID # _____
(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1300 gal. used oil
_____ gal. _____

EPA Multi-Stop Cert. on file Y N (driver circle one) P.U. TEST FEE $30.00
(If not get signed)

General Comments: _____

Comment s for Invoices _____

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal, state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

This Used Oil Tested: ☒ Under 1,000 PPM Halogens/ Non Hazardous
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

NO INVOICE WILL BE SENT - PLEASE PAY FROM THIS RECEIPT

X _____
Signature

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003544

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 888-645-9278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1450 G 9 3	1 6 7 0
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Shelly Heston	Shelly Heston	3	2	97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hale	William E Hale	3	2	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Beth White	Beth White	3	2	97

RCRA NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003544

2. Page 1 of

3. Generator's Name and Mailing Address
ULTRA MOLIEDENUM CO
2596 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-453-1221)

9 1 9 1 1 1 0 1 3

5. Transporter 1 Company Name [illegible] INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
1001 SW WASHINGTON ST
PEORIA IL 61602-1965

10. US EPA ID Number

E. State Facility's ID [illegible]

F. Facility's Phone [illegible]

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1450 G	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William J Hall	[signature]			

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

RCRA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003545

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 888-445-9238

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1600 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

NON-HAZARDOUS WASTE

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Sheily Heston — Signature: Shelly Heston — Date: Month 4 Day 14 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WILLIAM E. HAILE — Signature: William E Haile — Date: Month 4 Day 14 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Beth Richards — Signature: Beth Richards — Date: Month 4 Day 14 Year 99

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003545

2. Page 1 of

3. Generator's Name and Mailing Address
[illegible]
2598 HWY 51
FT MADISON IA 52627

4. Generator's Phone (319-463-2221)

5. Transporter 1 Company Name [illegible]

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
2001 SW WASHINGTON ST
PEORIA IL 61602-1966

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone [illegible]

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1600 G	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
		4	[illegible]	[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
[illegible]	[illegible]	4	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

RCRA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003546

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 309-676-1278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL / WATER	001	TT	1400 6 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Jim Cole		5	26	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hoole	William E Hoole	5	26	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

RCRA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

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Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILP000056507

Ticket # 52052
Date 5-26-99
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CHEMAX
Street _____
City Ft Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

1400 total gals. on truck
_____ gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at .63 ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE $30.00
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X _____
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003547 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name: OIL WASTE SERVICES, INC
6. US EPA ID Number:
A. State Transporter's ID 888-545-9278
B. Transporter 1 Phone

7. Transporter 2 Company Name
8. US EPA ID Number
C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number
E. State Facility's ID 1 4 3 0 6 5 0 0 1 5
F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	G 9 3 1 6 7 0	
b.			3200	
c.				
d.				

GENERATOR

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

RECEIVED
SEP 21 1999
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Tim Bruhl	Tim Bruhl	9	15	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
GARY BOYER	Gary Boyer	9	15	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Rick Donath	Rick Donath	9	16	99

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003546

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone (309) 6211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL/water	001	TT	1400	
b.				
c.				
d.				

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Jim Cole

Signature

Date: Month 5 Day 24 Year 97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month 5 Day 24 Year 97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Bill Lechaids

Signature: Bill Lechaids

Date: Month 5 Day 26 Year 97

RCRA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003549

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Tr[illegible]9278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's [illegible]676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1600 G 9	3 1 6 7 0
b.				
c.				
d.				

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

RECEIVED
JAN 18
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
MIKE HENPEN	Michael Henpen	1 7 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
William F. Hartle	William E Hartle	1 7 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Beth Richards	Beth Richards	1 7 00

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003549

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2596 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LEMI OIL SERVICE INC
800 SW WASHINGTON ST
PEORIA IL 61602-1969

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

GENERATOR

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	--		
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

RCRA NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808 PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

N/C 1
plr
Shell

Ticket # 54780
Date 1-7-00
Route # 21
Trk Report # _____
Drivers Initials WEH

Federal EPA ID # ILD038411955

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1100 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file (If not leave one) Y N (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

x Mike Hempen
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002909 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4 0 4 2 3

5. Transporter 1 Company Name: LENZ OIL SERVICE INC | 6. US EPA ID Number

A. State Transporter's ID 309-676-0211

B. Transporter 1 Phone

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

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL	001	TT	1750 G 9 3 1 6 7 0	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: WILLIAM E. HAILE | Signature: William E Haile | Date Month 2 Day 1 Year 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WILLIAM E HAILE | Signature: William E Haile | Date Month 2 Day 1 Year 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Beth Richards | Signature: Beth Richards | Date Month 2 Day 1 Year 00

NON-HAZARDOUS WASTE

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002909

2. Page 1 of

3. Generator's Name and Mailing Address
LIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 5 4

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
1001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL	001		1750	G 9 3 1
b.				
c.				
d.				

GENERATOR

. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hoile	William E. Hoile	2	1	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hoile	William E Hoile	2	1	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808 PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 54919
Date 2-1-00
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1750 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X WEH
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Use only elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003737

2. Page 1 of

3. Generator's Name and Mailing Address
IMAX MOLYBDENUM CO
598 HWY 61
T MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name
IL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 888-645-8278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
ENZ OIL SERVICE INC
001 SW WASHINGTON ST
EORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. ON HAZARDOUS USED OIL 001	TT		2500 G 9 3 1 6	7 0
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Shelly Heston	Shelly Heston	4 18 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	4 18 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Beth Richards	Beth Richards	4 18 00

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808 PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003737

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
598 HWY 61
T MADISON IA 52627
319-463-2224

4. Generator's Phone ( )

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
ENZ OIL SERVICE INC
901 SW WASHINGTON ST
ORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS USED OIL	001	TT	2500 G 9 3 1	7 0
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Shelly Heston | Signature: Shelly Heston | Date: Month 4 Day 14 Year 20

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E Hale | Signature: William E Hale | Date: Month 4 Day 19 Year 20

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

1 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 55934
Date 4-18-00
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
2500 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Shelly Heston
Generator Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002907

2. Page 1 of

3. Generator's Name and Mailing Address
AMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL	001	TT	4000 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	9 28 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	9 28 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Beth Richards	Beth Richards	9 28 00

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002907

2. Page 1 of

3. Generator's Name and Mailing Address
IMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
1001 SW WASHINGTON ST
PEORIA IL 61602-1758

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
NON HAZARDOUS USED OIL			4000	
b.				
c.				
d.				

GENERATOR

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William F. Hall	William F. Hall			

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

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Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 57890
Date 9-28-00
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City FT. MADISON State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
4000 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file (If not leave one) Y N (Driver circle one) TEST FEE _____
TOTAL _____
General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X WEH
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002483

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 9 1 9 1 1 1 0 1 3 4 0 4 2 3

B. Transporter 1 Phone 309-676-0211

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	2400 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

NON-HAZARDOUS WASTE

12. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Shelly Heston	Shelly Heston	12	4	00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E Hazlet	William E Hazlet	12	4	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Beth Richards	Beth Richards	12	4	00

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST XXX

1. Generator's US EPA ID No.

Manifest Document No. 7002483

2. Page 1 of

3. Generator's Name and Mailing Address

CLIMAX MOLYBDENUM CO
2598 HWY 61
ST MADISON IA 52627

4. Generator's Phone (319-447-2224)

5. Transporter 1 Company Name

LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 0 4 2 3

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-675-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	T	6 9 3 5 7 5	
b.				
c.				
d.				

GENERATOR

NON-HAZARDOUS WASTE

15. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
[illegible]	[signature]	12	4	[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
[illegible]	[signature]	12	4	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 58883
Date 12-4-00
Route # 21
Trk Report # _____
Drivers Initials WCH

Federal EPA ID # ILD038411955

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
240 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file (If not leave one) Y N (Driver circle one) TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested: ☑ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Shelly Horton
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No.

Manifest Document No. 7003548

2. Page 1 of

FEB - 7 2001

CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4
4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 888-645-9278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1300 G	9 3 1 6 7 0
b.				
c.				
d.				

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Shelly Heston
Signature: Shelly Heston
Date: Month 1 Day 23 Year 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E Haile
Signature: William E Haile
Date: Month 1 Day 23 Year 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space

Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Beth Richards
Signature: Beth Richards
Date: Month 1 Day 23 Year 01

GENERATOR

TRANSPORTER

FACILITY

HORA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. XXXXXXXXX

Manifest Document No. 7003548

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-453-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	00	TT	1300	
b.				
c.				
d.				

GENERATOR

J. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

KCRA NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 60923
Date 1-23-01
Route # 21
Trk Report # _____
Drivers Initials WEN

Federal EPA ID # ILD038411955

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1300 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Shelly Horton
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002484

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
12598 HWY 61
FT MADISON IA 52627

4. Generator's Phone 319-463-2224

5. Transporter 1 Company Name
LENZ OIL SERVICE INC

6. US EPA ID Number

A. State Transporter's ID 309 676 0211

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS USED OIL	001	TT	1700 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Shelly Heston	Shelly Heston	3 7 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	3 7 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Betti Richards	Betti Richards	3 7 01

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7002484 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
E598 HWY 61
FT MADISON IA 52627
4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
LENZ OIL SERVICE INC
6. US EPA ID Number
A. State Transporter's ID 0 4 2 5
B. Transporter 1 Phone

7. Transporter 2 Company Name
8. US EPA ID Number
C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVILE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1760
10. US EPA ID Number
E. State Facility's ID 4 3 0 6 5 0 0 1 5
F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
GENERATOR a. NON HAZARDOUS USED OIL	001	T	1700 G 9 3 1 6 7 0	
b.				
c.				
d.				

NON-HAZARDOUS WASTE

e. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
JOHN HEATON	John Heaton	3	7	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
WILLIAM F HEATH	William F Heath	3	7	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

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Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 60444
Date 3-7-05
Route # 21
Trk Report # _____
Drivers Initials WSH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1700 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

x Shelly Weston
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003550

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 4 2 9 2

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 666-685-9278

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1500 G 9 3 1 6 7 0	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Shelly Heston	Shelly Heston	5	2	01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hall	William E Hall	5	2	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Beth Richards	Beth Richards	5	2	01

RCRA NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7003550

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2593 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3201 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone 676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1500	G
b.				
c.				
d.				

GENERATOR

RCRA NON-HAZARDOUS WASTE

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
[illegible]	[signature]	5	5	[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
[illegible]	[signature]	5	7	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

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Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 062655
Date 5-2-01
Route # 21
Trk Report # _____
Drivers Initials LWEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City FT. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1500 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file (If not leave one) Y N (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested: ☒ Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Shelly Heston
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7005026

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 4 2 9 2

B. Transporter 1 Phone 800-645-9270

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1000 G	9 3 1 6 7 0
b.				
c.				
d.				

GENERATOR

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

RCRA NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HALL	William E Hall	6 27 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HALL	William E Hall	6 27 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Bob Richards	Bob Richards	6 27 01

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No.

Manifest Document No. 7005026

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2596 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
2001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone 309-676-1211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL			1000	
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
		6	2	

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
		6	2	

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

RCRA NON-HAZARDOUS WASTE

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Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILP000056507

Ticket # 64277
Date 6-27-01
Route # 21
Trk Report # _____
Drivers Initials WEH

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLEMax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1000 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file (If not leave one) Y N (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested X Non Hazardous (under 1000 PPM Halogens/Non Flamable)
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X WSH
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7005027

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 9 1 9 1 1 1 0 1 3 4 2 9 2

B. Transporter 1 Phone 888-645-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1000 6 9 3 1 6 7 0	
b.				
c.				
d.				

Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	9 19 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	9 19 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX		

FACILITY

19. Discrepancy Indication Space

CLIMAX MOLYBDENUM CO

Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Beth Richards	Beth Richards	9 19 01

NON-HAZARDOUS WASTE

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PRINTED WITH SOY INK

Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

RCRA NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7005027

2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.				
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month / Day / Year)

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Day / Year)

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Day / Year)

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month / Day / Year)

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 65561
Date 9-19-01
Route # 21
Trk Report # _____
Drivers Initials WEH

Federal EPA ID # ILP000056507

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Climax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1000 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested Non Hazardous (under 1000 PPM Halogens/Non Flamable) Unless Marked Otherwise Below. ❑ Over 1,000 PPM _____ ❑ ESQG under 40CFR 261.5
❑ Rebutted Metalworking Oil ❑ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal, state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

x WEH
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

RECEIVED
FEB - 8 2002
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7005029 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224)

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 4 2 9 2

B. Transporter 1 Phone 888-645-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	5986 G	9 3 1 6 7 0
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Stanley R. Smeltzer		2	1	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
GARY BOYER		2	1	2002

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Beth Richards		2	1	02

RCRA NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808 PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

RCRA NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7005029

2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

GENERATOR

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.				
b.				
c.				
d.				

F. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date: Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date: Month	Day	Year

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007447 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627
4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 4 2 9 2
B. Transporter 1 Phone 888 645 9270

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID I 4 3 0 6 5 0 0 1 5
F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	4821	G 9 3 L 6 7 0
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Dean Campbell	Dean Campbell	6	11	2002

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
GARY BOYER	Gary Boyer	6	11	2002

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Bill Richards	Bill Richards	6	11	02

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007447

2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.				
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

ORIGINAL SIGN by Dean Campbell

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY BAKER | Signature | Date: Month Day Year: 6 11 [illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

19. Discrepancy Indication Space

F

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

F14

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

RECEIVED
OCT 15 2002
CLIMAX MOLYBDENUM COMPANY
FORT MADISON, IOWA

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007448 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627
4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 4 2 9 3

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID
B. Transporter 1 Phone 888-645-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5
F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a NON HAZARDOUS USED OIL	001	TT	1200 G	9 3 1 6 7 0
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	10	7	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Hasle	William E. Hasle	10	7	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Beth Richards	Beth Richards	10	7	02

NON-HAZARDOUS WASTE

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007448

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319-463-2224

9 1 9 1 1 1 0 1 3 4 4 2 9

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	1200 G 9 3	1 6 7 G
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Joseph L. Bartholomew	Joseph L. Bartholomew	10	7	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Haile	William E. Haile	10	7	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 72221
Date 10-7-02
Route # 21
Trk Report # _____
Drivers Initials WEH

IL EPA ID#1430655582

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City FT. MADISON State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1200 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one)
TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice **ONLY**: _____

This Waste Tested Non Hazardous (under 1000 PPM Halogens/Non Flamable) Unless Marked Otherwise Below. ❑ Over 1,000 PPM _____ ❑ ESQG under 40CFR 261.5
❑ Rebutted Metalworking Oil ❑ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal, state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Joseph L. Bartholomew
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007449 | 2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone ( ) 319-463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 9 1 9 1 1 1 0 1 3 4 4 2 9 2

B. Transporter 1 Phone 888-645-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	2200 G 9 3 1 6 7 0	
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Michael B. Price | Signature: Michael B Price | Date: Month 10 Day 28 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E. Haile | Signature: William E. Haile | Date: Month 10 Day 28 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Beth Richards | Signature: Beth Richards | Date: Month 10 Day 28 Year 02

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST XXXXXX

1. Generator's US EPA ID No.

Manifest Document No. 7007449

2. Page 1 of

3. Generator's Name and Mailing Address

CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name

OIL WASTE SERVICES. INC

6. US EPA ID Number

A. State Transporter's ID 4 2 9

B. Transporter 1 Phone 888-643-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	2200 G 9 3	1 6 7
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Michael B Price | Signature: Michael B Price | Date: Month 10 Day 28 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William E. Haile | Signature: William E. Haile | Date: Month 10 Day 28 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 73399
Date 10-28-02
Route # 21
Trk Report # _____
Drivers Initials WEH

IL EPA ID#1430655582

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CLIMAX
Street _____
City FT. MADISON State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2: _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
2200 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one) TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested Non Hazardous (under 1000 PPM Halogens/Non Flamable) Unless Marked Otherwise Below. ❑ Over 1,000 PPM _____ ❑ ESQG under 40CFR 261.5
❑ Rebutted Metalworking Oil ❑ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal, state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Michael R Price
Generators Signature - Generator certifies that he/she has read certification above.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 7007450

2. Page 1 of

3. Generator's Name and Mailing Address

CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone (319) 463-2224

5. Transporter 1 Company Name

OIL WASTE SERVICES, INC

6. US EPA ID Number

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

A. State Transporter's ID 9 1 1 1 0 1 3 4 4 2 9 2

B. Transporter 1 Phone 888-645-9278

C. State Transporter's ID

D. Transporter 2 Phone

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL	001	TT	G 9 3 1900	6 7 0
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
x Shelly Heston	Shelly Heston	1 30 03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
WILLIAM E. HAILE	William E Haile	1 30 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Beth Richards	Beth Richards	1 30 03

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST XXXXXXXXXXXXXXXXXXXX

1. Generator's US EPA ID No.

Manifest Document No. **7007450**

2. Page 1 of

3. Generator's Name and Mailing Address
CLIMAX MOLYBDENUM CO
2598 HWY 61
FT MADISON IA 52627

4. Generator's Phone ( ) 319-463-2224

5. Transporter 1 Company Name
OIL WASTE SERVICES, INC

6. US EPA ID Number

A. State Transporter's ID 9 1 9 1 1 1 0 1 3 4

B. Transporter 1 Phone 888-645-9278

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
LENZ OIL SERVICE INC
3001 SW WASHINGTON ST
PEORIA IL 61602-1968

10. US EPA ID Number

E. State Facility's ID 1 4 3 0 6 5 0 0 1 5

F. Facility's Phone 309-676-0211

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON HAZARDOUS USED OIL			1900	
b.	001	TT	G 9 3 1 6 7 0	
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
x Shelly Heston	Shelly Heston	1	30	03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
William E. Haile	William E Haile	1	30	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19:

Printed/Typed Name	Signature	Date Month	Day	Year

GENERATOR

TRANSPORTER

FAC

NON-HAZARDOUS WASTE

0) 621-5808 www.labelmaster.com PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK Rev. 3/95

OIL WASTE SERVICES, INC.
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Ticket # 71448
Date 1-30-03
Route # 21
Trk Report # _____
Drivers Initials WEN

IL EPA ID#1430655582

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name CHEMAX
Street _____
City Ft Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

(Not required for multi-stop permitted pick-ups)

_____ total gals. on truck
1900 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____

EPA Generator Cert. on file Y N (If not leave one) (Driver circle one) TEST FEE _____
TOTAL _____

General Comments: _____

Comments for this Invoice ONLY: _____

This Waste Tested Non Hazardous (under 1000 PPM Halogens/Non Flamable) Unless Marked Otherwise Below. ❑ Over 1,000 PPM _____ ❑ ESQG under 40CFR 261.5
❑ Rebutted Metalworking Oil ❑ Rebutted CFC Compressor Oil

GENERATOR CERTIFICATION

We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported by Oil Waste Services, Inc. to be recycled in accordance with all federal, state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

X Shelly Heston
Generators Signature - Generator certifies that he/she has read certification above.

10. Identify each material placement or storage area at the Fort Madison facility.

Utility Pond
Used Acetone Accumulation Area
Used Oil Accumulation Tanks
Fluorescent Bulb Accumulation Area/Sewage Storage and Treatment Facility
Spray Can Residue Accumulation Area
Gypsum Ponds
Feedstock Storage Area
Product Storage Area
Stormwater Collection and Discharge Areas
Landfill

All areas are described in Section 10.

Climax Molybdenum Company
Question 10

See attached map for further explanation.

1. **Utility Pond.** This is the NPDES discharge point for the facility. The effluent from this pond is made up of effluent from the gypsum pond, which is located on the North end of the facility, boiler blowdown, cooling tower blowdown, treated sanitary wastewater and rainwater. The effluent is pumped to the Utility pond through aboveground pipes. The effluent enters a sump located on the East Side of the utilities building where the pH is adjusted before being pumped through above ground pipe to the east corner of the utility pond. The pond is 220' long by 120' wide and is 5' deep. It can hold approximately 987,428 gallons of water. It is clay lined and was built in 1976. Effluent from the gypsum pond is pumped through the facility to the utility pond via an above ground pipe. The above ground piping from the utility sump to the northeast corner of the pond is inspected for leaks on a daily basis. Gypsum is periodically removed from this pond and sent to the company owned landfill along with the material from the gypsum ponds.

2. **Used Acetone Accumulation Area.** Used acetone from the laboratory operations is placed in a 33-gallon drum, which is located in its own storage area adjacent to the flammable liquid storage area. Material is manually placed in the drum. The drum is managed as a hazardous waste satellite accumulation container. When the drum is close to being filled a waste handler is contacted about transporting it to an off-site hazardous waste facility.

3. **Used Oil Accumulation Tanks.** There are 2 storage tanks located in the SE corner of the West Chemical Plant (Molysulfide area). Used oil is piped from the molysulfide kiln to the tanks. The piping is above ground and located within the building. The tanks were put into operation in 2000. Prior to use of the tanks, the used oil was placed in barrels and was stored on a containment pad located to the east of the utilities building. Used oil is picked up and recycled at an off-site facility. The frequency that the used oil is picked up by an outside source depends on how much material is processed through the molysulfide kiln. It can range from quarterly pick ups to semi annual pick ups.

4. **Fluorescent Bulb Accumulation Area/Sewage Storage and Treatment Facility.** The fluorescent bulbs, computer parts, batteries, and capacitors are all stored in the building that houses the sewage treatment plant. The fluorescent bulbs are stored in fiber drums. The computer parts are stored in 55-gallon drums and the batteries and capacitors are stored in 5 gallon buckets. The material is sent off site for recycling once a quarter as a Universal waste.

   The sewage treatment facility treats all of the sanitary wastewater from the facility. None of the process water or stormwater is sent to this facility. The sewage treatment facility consists of two collection lift stations, an equalization tank, an aeration tank, clarifier, multimedia filter, clear well, and final effluent collection tank. The effluent from this plant is sent via underground piping to the roaster building where it joins the effluent from the gypsum pond before entering the utility sump in the utilities area.

5. **Spray Can Residue Accumulation Area**. A 55-gallon drum is located in the SE corner of the maintenance shop. It has a can puncture apparatus and a filter attached to it. The spray cans are punctured and the residue drains into the drum while the spray can is disposed of in the general trash. The spray can puncturing was begun in 1995. It is used on a weekly basis asn is managed as a satellite accumulation container. Before the container is full, it will be sent off-site to a hazardous waste facility.

6. **Gypsum Ponds**. Gypsum from the lime pit is pumped via an above ground hose to the North end of the gypsum pond. The solids settle in the ponds while the water passes on to the Utility pond where it leaves the NPDES discharge point. The effluent from the gypsum pond is pumped into an above ground pipe that passes over the North road and through the roaster building, warehouse, and chemical plant. From the chemical plant it is directed to the utility sump where it is adjusted for pH control.

   The gypsum pond is cleaned out once every other year. The material is dredged and run through a filter press. The solids are collected and disposed of in the company landfill while the effluent goes back into the pond. The pond was constructed in 1975 and is 220' wide by 472' long and 7' deep. A second pond was constructed in 1980 and was used through 1995. In 1995 this second pond was cleaned completely, drained and filled in. It was located to the west of the existing pond.

7. **Feedstock Storage Area.** The molybdenum feedstocks are shipped in via truck. The material is contained in 3500 pound supersaks. The material is stored outside on the East side of the roaster building on one of two concrete pads. The material is unloaded from the bags into a dumping station which then moves it to one of three silos before being processed by the roasters.

8. **Product Storage Area.** The molybdenum chemicals and molysulfide are stored in a product warehouse, which is located in the middle of the plant between the roasting area and the chemical plant. All of the product located on site is stored in this area.

9. **Stormwater Collection and Discharge Areas**. Existing stormwater controls consist of storm sewer lines. There are two outfalls for the storm water to drain into the retention ponds located just outside the plan fence line. Both outfalls are equipped with a shutoff valve. This valve will be closed in case of a spill to avoid the discharge into the retention pond. The storm water from the retention ponds is discharged into the Mississippi River.

10. **Landfill.** The gypsum taken out of the gypsum pond is taken to the company landfill which is located approximately 10 miles from the molybdenum processing facility. The State of Iowa (Permit No. 56-SDP-06-80P) permits this landfill. It only accepts waste gypsum and ceramic saddles from the acid plant. All municipal waste is taken to the local landfill.

11. Identify all materials which you assert are recyclable or are being recycled, are being reclaimed, are reclaimed, or are secondary materials from mineral processing or brought on site for processing from which values will be recovered. See Section 11.

STATEMENT OF CONFIDENTIALITY
QUESTION 11, TAB 11

Climax Molybdenum Company ("Climax") hereby asserts a claim of confidentiality over its response to question 11 and all documentation provided in response to question 11 (collectively the "Documents"). The Documents are enclosed under Table 11 of the binder in a sealed envelope as part Climax's response to Question 11 of the Request. Climax is providing the Document to the U.S. Environmental Protection Agency ("EPA") in response to the information request issued by EPA pursuant to Section 3007(a) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.S. § 6927(a) (2002), and dated February 4, 2003. The request pertains to the Climax Molybdenum Company Fort Madison Facility in Fort Madison, Iowa (the "Facility").

RCRA Section 3007(b) states that EPA shall not make available to the public any records, reports, or information obtained by EPA through a Section 3007(a) information request upon a satisfactory showing that such records, reports, or information are entitled to protection under 19 U.S.C.S. § 1905 (2003).[1] Therefore, pursuant to Section 3007(a) and 40 C.F.R. § 2.208(e) (2002), Climax states the following:

9. The Documents should be treated as confidential on a permanent basis.

10. The information contained in the Documents will not become stale because (1) the information contained in the Documents will continue to reflect the sources of rhenium feedstock for the facility and the disposition of its products for the foreseeable future, (2) Climax intends to use the procedures described for the foreseeable future; and (3) the Documents describe the constituents of its rhenium products.

11. Access to the information contained in the Document is confined to a select number of individuals at the Facility and only a few copies of these Documents are available.

12. To our knowledge, the information contained in the Documents has never been disclosed to any person other than Climax's agents and employees.

13. To our knowledge, no government body has made a determination as to the confidentiality of the information contained in the Documents.

14. To our knowledge, the information contained in the Documents cannot be found in any publicly available material and there are no means by which a member of the public could obtain access to the information.

15. The Documents contain sensitive and detailed information concerning (1) the sources of rhenium feedstock for the Facility and the disposition of its rhenium products, and (2) the procedures used in the production of rhenium products at the

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[1] 19 U.S.C.S. § 1905 protects from disclosure documents containing information which "concerns or relates the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association."

Facility. Public disclosure of the Documents would give Climax's competitors access to confidential marketing information and confidential operating procedures which provide Climax with a competitive advantage in the rhenium production industry.

16. The information contained in the Documents is not submitted voluntarily.

CERTIFICATE OF ANALYSIS

CORRESPOND TO

EMS Laboratories, Inc.
7901 West Morris Street
Indianapolis, Indiana 46231
(317) 243-8304

SAMPLE

EMS SAMPLE : 133421
REPORT DATE : 11/17/89
DATE RECEIVED : 10/26/89
DATE COMPLETE : 11/16/89

REPORT TO

TOM ANDERSON
AMAX
P.O. BOX 220
FORT MADISON IA 52627

BILL TO

TOM ANDERSON
AMAX
P.O. BOX 220
FORT MADISON IA 52627

DESCRIPTION

RHENIUM CAKE RE89GL-24

DATE :
TIME :

P.O. NUMBER : D 05845

TEST DESCRIPTION / ANALYTE	RESULT	METHOD	DATE / DET. LIMIT	ANALYST / UNITS
ARSENIC, LEACHATE		SW846-7060	11/14/89	SEG
ARSENIC, LEACHATE	: 4.0		1.0	MG/L
INSTRUMENT	: PE 3030 GFAA			
ADDITION 1 (MG/L)	: 0.010			
SAMPLE ABS	: 0.078			
SAMPLE + ADD 1 ABS	: 0.119			
DILUTION	: 1:200			
BARIUM, LEACHATE		SW846-7080	11/10/89	AJD
BARIUM, LEACHATE	: BDL		0.20	MG/L
INSTRUMENT	: IL S12 FAA			
ADDITION 1 (MG/L)	: 5.0			
SAMPLE CONC	: 0.11			
SAMPLE + ADD 1 CONC	: 4.65			
DILUTION	: NA			
CADMIUM, LEACHATE		SW846-7130	11/13/89	AJD
CADMIUM, LEACHATE	: BDL		0.02	MG/L
INSTRUMENT	: IL S12 FAA			
ADDITION 1 (MG/L)	: 0.5			
SAMPLE CONC	: 0.01			
SAMPLE + ADD 1 CONC	: 0.45			
DILUTION	: NA			
CHROMIUM, LEACHATE		SW846-7190	11/13/89	AJD
CHROMIUM, LEACHATE	: 0.37		0.05	MG/L
INSTRUMENT	: IL S12 FAA			

TEST DESCRIPTION / ANALYTE	RESULT	METHOD	DATE / DET. LIMIT	ANALYST / UNITS
ADDITION 1 (MG/L)	: 1.0			
SAMPLE CONC	: 0.37			
SAMPLE + ADD 1 CONC	: 1.39			
DILUTION	: NA			
LEAD, LEACHATE		SW846-7420	11/10/89	LMT
LEAD, LEACHATE	: BDL		0.20	MG/L
INSTRUMENT	: IL S12 FAA			
ADDITION 1 (MG/L)	: 5.0			
SAMPLE CONC	: 0.01			
SAMPLE + ADD 1 CONC	: 5.52			
DILUTION	: NA			
MERCURY, LEACHATE		SW846-7470	11/08/89	AJD
MERCURY, LEACHATE	: BDL		0.0050	MG/L
INSTRUMENT	: IL S12 FAA			
ADDITION 1 (MG/L)	: 0.0020			
SAMPLE (ABS)	: 0.002			
SAMPLE + ADD 1 (ABS)	: 0.064			
DILUTION	: NA			
SELENIUM, LEACHATE		SW846-7740	11/14/89	PAS
SELENIUM, LEACHATE	: BDL		0.050	MG/L
INSTRUMENT	: PE 5100 GFAA			
ADDITION 1 (MG/L)	: 0.010			
SAMPLE ABS	: 0.001			
SAMPLE + ADD 1 ABS	: 0.043			
DILUTION	: 1:10			
SILVER, LEACHATE		SW846-7760	11/13/89	LMT
SILVER, LEACHATE	: BDL		0.04	MG/L
INSTRUMENT	: IL S12 FAA			
ADDITION 1 (MG/L)	: 0.5			
SAMPLE CONC	: BDL			
SAMPLE + ADD 1 CONC	: 0.46			
DILUTION	: NA			
TCLP EXTRACTION		SW846-1311	11/06/89	MAS
TCLP EXTRACTION	: COMPLETE		NA	NA
TOT. SAMPLE WT., G	: 100			
LIQUID FRACTION, G	: 0			
LIQUID FRACTION, ML	: 0			
9.5 mm SIEVE TEST	: PASSED			
> 0.5 PERCENT SOLIDS	: YES			
INITIAL PH, STD UNIT	: 2.0			
ADJUSTED PH	: NA			
BUFFER SOLUTION PH	: 4.92			
EXT. SAMPLE, G	: 95			
VOL. BUFFER SOLN, ML	: 1900			
VOL. EXT. FILT., ML	: 1900			

EMS SAMPLE : 133421

TEST DESCRIPTION ANALYTE	RESULT	METHOD	DATE DET. LIMIT	ANALYST UNITS
TOT. VOL. FILT., ML.....	: 1900			
INITIAL TIME, HRS	: 6335.8			
FINAL TIME, HRS	: 6353.8			
ACID DIGESTION OF LEACHATE FOR FAA OR ICP		SW846-3010	11/09/89	SWS
METALS DIGESTION	: COMPLETE		NA	ML
INITIAL VOL, ML	: 100			
FINAL VOL, ML	: 100			
ACID DIGESTION OF LEACHATE FOR GFAA		SW846-3020	11/09/89	SWS
METALS DIGESTION	: COMPLETE		NA	ML
INITIAL VOL, ML	: 100			
FINAL VOL, ML	: 100			

ND - Not Detected
NA - Not Applicable
BDL - Below Detection Limit

Approved by : D. Peterson

12. Identify all materials listed in your response to question 11 that are brought in from off-site for recycling or reclamation at your Facility, and all materials that are sent off-site for recycling or reclamation.

We currently do not have any materials brought from off-site for recycling or reclamation. There are not any materials being sent off-site for recycling or reclamation other than those identified in response to question 7.

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Spray can residue

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Spray can residue

Area of Generation: Plant Maintenance

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid material drained from various spray cans used by the Maintenance Department throughout the plant. Contains xylene, toluene, is ignitable. Ethylbenzene

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- [X] It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** F003
- [ ] It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- [ ] It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- [ ] The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- [ ] The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- [X] It is **not** a listed waste under the "P" or "U" listed waste codes.
- [X] None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☒ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

(The material is a **hazardous waste.**)

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Listed F003 And ignitable

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EOG facility

1/10/2001

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Sand (98%) Sodium Hydrosulfide (2%)

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Sand / Sodium Hydrosulfide

Area of Generation: Acid Plant

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid Material. Approximately 10 gallons of 45% Sodium Hydrosulfide Solution was sprayed on a pile of Sand. The resulting mixture was less than 2% Sodium Hydrosulfide Solution.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093...) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Consisted mainly of sand. Not enough Sodium hydrosulfide to be reactive.

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EQ6 facility

7/17/2000

EOG Environmental, Inc.

5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number:
Approval #:
WID98850056

A. Generator Name: Climax Molybdenum Company Customer #: Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft. Madison, IA 52627 SIC Code: City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: Contact: Susan Garrett Title: Trans. Coordinator
Telephone: (319) 463-7151 Ext. Fax #: (319) 463-7159 Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☒ MSDS ☒ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Sand contaminated w/Sodium Hydrosulfide, Solution
Process Generating Waste: Spill
Color: dark brn. Odor: rotten egg ☐ None ■ Mild ☐ Strong ☒ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases ☐ Liquid % ☐ Powder % ☐ Solid % ■ Sludge 100 %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes:
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 275-550 Units: Gal.
Proper Shipping Name: Non-regulated material
Hazardous Class #: PG #: UN/NA #: Additional Description:
CERCLA Reportable Quantity (RQ): Volume on Hand: 5 X 55
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		Silver	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <300				
Lead	☒ <5 ☐ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☐ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☒ <1.4-1.7	☐ >1.7	Actual:
Total Suspended Solids:		☐ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☒ >20	Actual:
pH:	☐ <2	☐ 2-6	☐ 6-8	☐ 8-10	☒ 10-12.5	☐ >12.5	Actual:
BTU's:	☒ <1	☐ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:	
Flash Point (Closed cup):		☐ <73°F	☐ 73-140°F	☐ >140-200°F	☒ >200°F	Actual:	
Sulfur (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:	

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☐ Low ☒ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Sodium Hydrosulfide, Solution	1-5	%		%		%		%		%	
Sand	95-99	%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master Sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X Shelly Heston X Environmental Mgr X 07/17/00 7/17/2000
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

Material Safety Data Sheet

Sodium hydrosulfide solution

MSDS Number 8000TDC (Revised: 6/19/02) 6 Pages

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

1.1 Product Name ..... **Sodium hydrosulfide solution**
Chemical Family ..... Inorganic salt solution
Synonyms ..... KI-300 depressant, NaHS, sodium hydrogen sulfide
Formula ..... NaHS

1.2 Manufacturer ..... Tessenderlo Davison Chemicals
1916 Farmerville Highway
Ruston, Louisiana 71270
Information ..... (318) 242-5305

1.3 Emergency Contact ..... (800) 877-1737 (Tessenderlo Kerley)
(800) 424-9300 (CHEMTREC)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

2.1 Chemical Ingredients (% by wt.)

Sodium hydrosulfide	CAS #:16721-80-5	20-45%
Water	CAS #:7732-18-5	55-80%

(See Section 8 for exposure guidelines)

Section 3: HAZARDS IDENTIFICATION

NFPA: Health - 3 Flammability - 2 Reactivity - 1

EMERGENCY OVERVIEW

Warning: Solution is highly alkaline
Contains hydrogen sulfide , a highly toxic gas.
Eye contact will cause marked eye irritation and possibly severe corneal damage.
Skin contact will result in irritation and possible corrosion of the skin.
Ingestion will irritate/burn mouth, throat and gastrointestinal tract. Contact with stomach acid will cause hydrogen sulfide vapors to be released.
Heating or acid will cause hydrogen sulfide gas to evolve.

3.1 POTENTIAL HEALTH EFFECTS

EYE: Contact with the eyes will cause marked eye irritation and possibly severe corneal damage.

Section 3: HAZARDS IDENTIFICATION, Cont.

SKIN CONTACT: Contact with the skin will cause skin irritation or burning sensation. Prolonged contact will result in corrosion of the skin.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Ingestion will result in severe burning and corrosion of mouth, throat and the gastrointestinal tract. If the ingested material contacts stomach acid, highly toxic hydrogen sulfide gas will be evolved.

INHALATION: Product solution and vapors contain highly toxic hydrogen sulfide gas. Exposure to this gas causes, headaches, nausea, dizziness and vomiting. Continued exposure can lead to loss of consciousness and death..

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.

Section 4: FIRST AID MEASURES

4.1 EYES: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye. Obtain immediate medical attention.

4.2 SKIN: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain immediate medical attention

4.3 INGESTION: DO NOT INDUCE VOMITING. If victim is conscious, immediately give 2 to 4 glasses of water. If vomiting does occur, repeat fluid administration. Obtain immediate medical attention.

4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

FLASH POINT: Not flammable **METHOD USED:** NA

5.2 FLAMMABLE LIMITS **Hydrogen sulfide** **LFL:** 4% **UFL:** 44%

5.3 EXTINGUISHING MEDIA: Water spray or foam or as appropriate for combustibles involved in fire.

5.4 FIRE & EXPLOSIVE HAZARDS: Solution is non-flammable. However if these solutions are exposed to heat or acids, hydrogen sulfide will be released and may form explosive mixtures with air (see above).

Keep containers/storage vessels in fire area cooled with water spray. Heating may cause the release of hydrogen sulfide vapors.

Section 5: FIRE FIGHTING MEASURES (Cont.)

5.5 FIRE FIGHTING EQUIPMENT: Because of the possible presence of toxic gases and the corrosive nature of the product, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Small releases: Confine and absorb small releases on sand earth or other inert absorbent. Oxidize residual reactive sulfides with a weak (3-5%) hydrogen peroxide solution.

6.2 Large releases: Wear proper protective equipment. Confine area to qualified personnel. Shut off release if safe to do so. Dike spill area to prevent runoff into sewers, drains (potential explosive mixtures of hydrogen sulfide in confined spaces) or surface waterways (potential aquatic toxicity). Recover as much of the solution as possible. Treat remaining material as a small release (above).

Section 7: HANDLING and STORAGE

7.1 Handling: Wear proper protective equipment (See Section 8). Avoid breathing product vapors. Avoid contact with skin and eyes. Use only in a well ventilated area. Dilute product only in enclosed containers. Wash thoroughly after handling.

7.2 Storage: Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures [<80° F (27° C)]. (See Section 10.4 for materials of construction)

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 RESPIRATORY PROTECTION: If working near open container or storage vessel opening or open tank truck dome cover, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent).

8.2 SKIN PROTECTION: Neoprene rubber gloves, chemical suit and boots should be worn to prevent contact with the liquid. Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded.

8.3 EYE PROTECTION: Chemical goggles and a full face shield.

8.4 EXPOSURE GUIDELINES:

	OSHA		ACGIH	
	TWA	STEL	TLV	STEL
Hydrogen sulfide	20 ppm (ceiling)		10 ppm (ceiling)	

8.5 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors. Where feasible scrub process or storage vessel vapors with caustic solution.
Maintain eyewash/safety shower in areas where chemical is handled.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 APPEARANCE:	Yellow to dark green liquid.
9.2 ODOR:	Strong hydrogen sulfide (rotten egg) odor.
9.3 BOILING POINT:	253 ?F(122.8 ?C) - 269 ?F (131.7 ?C)
9.4 VAPOR PRESSURE:	17 mm Hg @ 68 ?F (20 ?C)
9.5 VAPOR DENSITY: (Air = 1.0)	1.17
9.6 SOLUBILITY IN WATER:	Complete
9.7 SPECIFIC GRAVITY:	1.152 - 1.303 (9.6 - 10.9 lbs/gal)
9.8 FREEZING POINT:	0? F (-17.8? C) - 20% 56° F (13.3° C) - 45%
9.9 pH:	11.5 - 12.5
9.10 VOLATILE:	Not applicable

Section 10: STABILITY and REACTIVITY

10.1 STABILITY: This is a stable material

10.2 HAZARDOUS POLYMERIZATION: Will not occur.

10.3 HAZARDOUS DECOMPOSITION PRODUCTS: Heating this product will evolve hydrogen sulfide. Fire conditions will also cause the production of sulfur dioxide. Hydrogen sulfide (4-44%) may form flammable mixtures with air.

10.4 INCOMPATIBILITY: Acids will cause the release of highly toxic hydrogen sulfide. Sodium hydrosulfide solution is not compatible with copper, zinc, aluminum or their alloys (i.e. bronze, brass, galvanized metals, etc.). Corrosive to steel above 150° F (65.5° C). These materials of construction should not be used in handling systems or storage containers for this product. (SEE Section 7.2, Storage)

Section 11: TOXICOLOGICAL INFORMATION

11.1 ORAL: Data not available

11.2 DERMAL: Data not available

11.3 INHALATION: INH-RAT LC_{50}: 444 ppm (hydrogen sulfide)
INH-MOUSE LC_{50}: 1,500 mg/m^3 18 minutes
INH-RAT LC_{50}: 1,500 mg/m^3 14 minutes

11.4 CHRONIC/CARCINOGENICITY: No evidence available

11.5 TERATOLOGY: Data not available

11.6 REPRODUCTION: Data not available

11.7 MUTAGENICITY: Data not available

Section 12: ECOLOGICAL INFORMATION

Static acute 96 hour-LC_{50} for mosquito fish is 206 mg/L. (Tl_m - fresh water)
LC_{50} fly inhalation 1,500 mg/m^3, 7 minutes
TL_m Gammarus 0.84 mg/L, 96 hours (hydrogen sulfide)
TL_m Ephemera 0.316 mg/L, 96 hours (hydrogen sulfide)
TL_m Flathead minnow 0.071 – 0.55 mg/L @ 6-24°C, 96 hour flow through bioassay (hydrogen sulfide)
TL_m Bluegill 0.0090 – 0.0140 mg/L @ 20-22°C, 96 hour flow through bioassay (hydrogen sulfide)
TL_m Brook trout 0.0216 – 0.0308 mg/L @ 8-12.5°C, 96 hour flow through bioassay (hydrogen sulfide)

Section 13: DISPOSAL CONSIDERATIONS

If released to the environment for other than its intended purpose, this product contains some reactive sulfides which may be in sufficient quantity to meet the definition of a D003, hazardous waste.

Section 14: TRANSPORT INFORMATION

14.1 DOT Shipping Name:	Sodium hydrosulfide, solution (Domestic only) Corrosive liquids, toxic, n.o.s. (International)
14.2 DOT Hazard Class:	8
14.3 UN/NA Number:	NA2922 (Domestic) UN2922 (International) UN2949 (IMDG - over water)
14.4 Packing Group:	II
14.5 DOT Placard:	Corrosive
14.6 DOT Label(s):	Corrosive Toxic
14.7 IMO Shipping Name:	Sodium hydrosulphide solution
14.8 RQ (Reportable Quantity):	5,000 lbs (2268 Kg) 100% basis
14.9 RR STCC Number:	28-123-33/49-352-04 (international)

Section 15: REGULATORY INFORMATION

15.1 OSHA:		This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
15.2 SARA TITLE III:	a.	**EHS** (Extremely Hazardous Substance) List:	No

Section 15: REGULATORY INFORMATION (Cont.)

b.	Section 311/312, (Tier I,II) Categories:	Immediate (acute)	Yes
		Fire	Yes
		Sudden release	No
		Reactivity	Yes
		Delayed (chronic)	No
c.	Section 313 (Toxic Release Report-Form R):		No
d.	**TPQ** (Threshold Planning Quantity):		No

15.3 CERCLA/SUPERFUND: RQ (Reportable Quantity) — 5,000 lbs (2270 Kg)

15.4 TSCA (Toxic Substance Control Act) Inventory List: — Yes

15.5 RCRA (Resource Conservation and Recovery Act) Status: — D003 (See Section 13)

15.6 WHMIS (Canada) Hazard Classification: — E, D1

15.7 DOT Hazardous Material: (See Section 14) — Yes

15.8 CAA Hazardous Air Pollutant (HAP) — No

Section 16: OTHER INFORMATION

REVISIONS: The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993.

Revised Sections 1.1, 8.3, 11, 12, 5/7/02
Revised pH range in Section 8, 6/19/02

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG, AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSARY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE MATERIAL SAFETY DATA SHEETS PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Used Oil And Absorbent

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Used Oil & Absorbent

Area of Generation: Maintenance Area

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid Absorbent Containing used oil. Absorbent used to clean up small oil spills.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!.

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.).

Reasoning: Does not exhibit hazardous waste characteristics See used oil determination

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Safety Kleen

10/9/1998

USED OIL AND ABSORBANT

81363-R4845
PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

PREQUALIFICATION EVALUATION

COMPLETED: 09/30/98
REVISED:
RUN: 10/01/98

ACCEPT AS BLANKET PREQUAL

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 3801788-8
LAB #: 6439801788-1
SURVEY #: 421488

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-5062

CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
P O BOX 220
FORT MADISON, IA 52627

ATTN: MIKE POHREE

BRANCH: 504701 - DAVENPORT

GENERAL DESCRIPTION: POLYPROPYLENE
NATURE OF BUSINESS: MOLYBDENUM MFG S.I.C.: STATUS: SQG
FEDERAL EPA ID: IAD000222653 STATE ID(S): IL 9190019999
FACILITY ADDRESS: MANIFEST BILLING ADDRESS:
2598 HWY 61 SOUTH
P O BOX 220
FORT MADISON, IA 52627
PROCESS DESCRIPTION: OIL
GENERATION AMOUNT: 55 GALLONS QUARTERLY PART#:
P.O. #: DATE SURVEY SIGNED: 04/24/97
CONTACT: MIKE POHREE TITLE: H & M EQUIP PHN: 319-463-7151
SURVEY COMMENTS:
SAMPLE #64843

*** ACCEPT AS BLANKET PREQUAL

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ACCEPT AS BLANKET PREQUAL

BRANCH/SUBMITTER: 504701 CONTROL #: 3801788-8
DAVENPORT LAB #: 6439801788-1
SURVEY #: 421488

CORPORATE REVIEW:
DISPOSITION: ACCEPT AS BLANK PART NUMBER: 0083337 DRUM,55 WASTE-SORBNT
REVIEW DATE: 08/17/1998 REVIEWERS: TW

APPROVED FACILITIES:

SAFETY-KLEEN SYSTEMS, INC.
1722 COOPER CREEK ROAD
DENTON, TX 76208
FED EPA#: TXD077603371
STATE EPA#: 65124
TELEPHONE: 9403832611
STATE AUTH:

SAFETY-KLEEN SYSTEMS, INC.
633 E 138TH ST
DOLTON, IL 60419
ILD980613913
0310690006
7088494850

SAFETY--KLEEN SYSTEMS, INC.
3700 LAGRANGE ROAD
SMITHFIELD, KY 40068
FED EPA#: KYD053348108
STATE EPA#:
TELEPHONE: 5028452453
STATE AUTH:

APPROVED DOT - SHIPPING DESCRIPTION
0001003 DRUM OR BULK USED OIL AND ABSORBENT MIXTURE
(NOT USDOT HAZARDOUS MATERIAL)

STATE/PROV. CODES: TX 0UTS4891 TX 4891 MI 021L SC 7777
US EPA WASTE CODES: NONE
USA

REVIEW COMMENTS:
****
*
* OK FOR POLYPROPYLENE ABSORBANT PROGRAM BASED ON GENERIC PREQUALIFICATION
* MO # 12-B IN THE GENERIC PROFILE MANUAL. POLYPORPYLENE ABSORBANTIS TO
* BE PROCESSED AT DENTON, DOLTON AND NEW CASTLE RC ONLY.
* WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE EQUIPPED WITH A
* BUNG IN THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM THE CUSTOMER
* LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.
*
* THIS CONTROL NUMBER IS ASSOCIATED WITH A GENERIC CONTROL NUMBER AND
* WILL HAVE MULTIPLE SURVEYS ASSOCIATED WITH IT.
*
* PROPER SHIPPING DESCRIPTION WAS BASED ON THIS SINGLE ANALYSIS. GENERATOR
* MUST CERTIFY THAT SHIPMENT IS NOT HAZARDOUS. PER COMPANY POLICY, FRS
* CUSTOMERS MUST COMPLETE GENERATOR CERTIFICATION WITH EACH SHIPMENT
* AND BRANCH WILL FILE IN CUSTOMER RECORDS.
****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY
NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS
WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION.
IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF
ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

THIS CONTROL NUMBER IS ASSOCIATED WITH A GENERIC CONTROL NUMBER AND
WILL HAVE MULTIPLE SURVEYS ASSOCIATED WITH IT.

*** ACCEPT AS BLANKET PREQUAL

CONTINUED ON NEXT PAGE

PREQUALIFICATION EVALUATION

COMPLETED: 09/30/98
REVISED:
RUN: 10/01/98

ACCEPT AS BLANKET PREQUAL

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 3801788-8
LAB #: 6439801788-1
SURVEY #: 421488

GENERAL ANALYSIS OF TOTAL SAMPLE

COLOR	:	LT GRAY
WATER CONTENT	:	< 0.1 WT%
NON-VOLATILE RESIDUE	:	100.0 WT% DESCRIPTION: SOLID
FLAMMABILITY	:	NO FLASH AT 140 F BY SETAFLASH
FLAMMABILITY	:	NO FLASH AT 73 F BY SETAFLASH
PH	:	EXTRACT BY METER 8.1
RADIOACTIVITY	:	NONE DETECTED

FUEL EVALUATION OF TOTAL SAMPLE

HEAT CONTENT	:	16900 BTU/LB	ASH UPON COMBUSTION	: <	1.0 WT%
TOTAL BROMINE	BR: <	0.1 WT%	TOTAL CHLORINE	CL: <	0.1 WT%
TOTAL FLUORINE	F : <	0.1 WT%	TOTAL SULFUR	S : <	0.1 WT%

GENERAL COMPOSITION: COMPOSITION BY:	APPEARANCE (VOL%)	TOTAL (WT%)
AQUEOUS PHASE (FREE WATER)	0.0	0.0
ORGANIC PHASE (FEEDSTOCK)	0.0	0.0
BOTTOM SLUDGE (SEMISOLIDS)	0.0	0.0
BOTTOM SOLID (SETTLED SOLIDS)	100.0	100.0
TOTAL	100.0	100.0

TOTAL PHASE SPECIFIC GRAVITY: .450 VISCOSITY (CENTIPOISE): > 50000 CPS

SPECIFIC COMPOSITION OF TOTAL SAMPLE COMPOSITION OF:	TOTAL SAMPLE (WT%)	TOTAL SAMPLE (WT%)
WATER CONTENT	0.1	0.1
NON-VOLATILE RESIDUE DESCRIPTION: SOLID	100.0	100.0
VOLATILE ORGANICS BY DIFFERENCE	0.0	0.0
TOTAL	100.0	100.0

VOLATILE ORGANIC COMPOSITION OF TOTAL SAMPLE BY GAS CHROMATOGRAPHY
SAMPLE PREPARATION METHODS: CS2-EXTRACT
DETECTION METHODS : FID, FID

COMPOUND NAME COMPOSITION OF:	VOLATILE ORGANICS (WT%)	TOTAL SAMPLE (WT%)
NO VOLATILE ORGANICS DETECTED (<0.1% EACH)	100.0	0.0
CODE: NONE CAS NUMBER:		
TOTAL		0.0

SPECIFIC ORGANIC COMPOSITION
POLYCHLORINATED BIPHENYLS (PCBS): NONE DETECTED <

*** ACCEPT AS BLANKET PREQUAL

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES

COMPLETED: 09/30/98
REVISED:
RUN: 10/01/98

ACCEPT AS BLANKET PREQUAL

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 3801788-8
LAB #: 6439801788-1
SURVEY #: 421488

THE ANALYSIS CONTAINED HEREIN ARE PERFORMED SOLELY FOR THE PURPOSE OF QUALIFYING THE ANALYZED MATERIALS FOR ACCEPTANCE BY SAFETY-KLEEN CORP. IN ACCORDANCE WITH ITS PERMITS AND PROCESSING CAPABILITIES.

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE IS NOT REQUIRED.

*** ACCEPT AS BLANKET PREQUAL

END OF DOCUMENT

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Lab Pack

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Lab Pack

Area of Generation: Quality Control Laboratory

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Obsolete Laboratory Chemicals

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☒ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** U228
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☐ It is **not** a listed waste under the "P" or "U" listed waste codes.
- _ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☒ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Listed WASte and Ignitable

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Ensco

5/1/1998

ensco ENPAK GROUP

I[illegible]SP[illegible]IFICATION FORM
Fo[illegible] Standards Found in 40 CFR 268

Gen[illegible]or Name: CLIMAX MOLYBDENUM
EPA [illegible]653

Manifest No.: 05436
State Doc.#: AR-905436

Seq.	WMDS	Waste Water	Lab Pack	Drums/*Waste Codes/UHC's	Special Conditions
11A	728085	N	N	/ U228 / 1,1,1-Trichloroethane*	None
11B	728086	N	N	/ D001(High TOC) / Methyl Ethyl Ketone*	None

N=Non Waste Water Y=Waste Water E=Eligible under 40CFR268.42(c) N=Not Eligible

*Regulated Hazardous Constituents, not the Underlying Hazardous Constituents (UHC's), must be identified for waste streams which carry the EPA Waste Codes, F001-F005, F039 and for California List wastes (40CFR268.32). UHC's must be identified for D001 (if Not Treated by CMBST or RORGS), D002, D012-D043 (if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities). Wastewater forms of D012-D017 do not require that UHC's be identified. List the constituents on the corresponding line or include a marked copy of the Universal Treatment Standards Sheet for each affected WMDS.

Special Conditions:

A. Waste Requiring No Further Treatment
B. Lab Pack Waste Qualifying for Alternative Treatment under 40 CFR 268.42(c)
C. Hazardous Waste Debris subject to standard treatment requirements, 40 CFR 268.40.
D. Hazardous Waste Debris subject to alternative standards in 40 CFR 268.45. (List Contaminants)
E. Waste Qualifying for Exemption and not subject to Land Disposal Restriction (Explain)
F. Waste already treated to remove a hazardous characteristic which requires additional treatment for underlying hazardous constituents. List constituents
G. Waste already treated to remove a hazardous characteristic and all the underlying hazardous constituents have been treated to levels in 268.48
H. For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY: This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 subpart FF.

Waste analysis is attached where available, otherwise, the information contained herein is based upon my thorough knowledge of the waste(s).

I hereby certify that I believe that the information I submitted is true, accurate and complete.

Signature Joseph L. Bartholomew Title ENVIRONMENTAL TECHNICIAN Date 5/19/98

Waste Streams Identified by Special Condition A:
I certify under penalty of law that I personally have examined and am familiar with the wastethrough analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Waste Streams Identified by Special Condition B:
I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes which have not been excluded under appendix IV to 40 CFR 268. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Waste Streams Identified by Special Condition F:
I certi[illegible]ier penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Isobutyl Alcohol

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Isobuty Alcohol

Area of Generation: Quality Control Laboratory

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid generated from laboratory analysis.
Ignitable liquid.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☒ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

(The material is a hazardous waste.)

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Ignitable liquid

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EOG Facility

6/30/1999

ACC# 11640

Print Date: 3/13/2003
Revision Date: 2/19/2001
Version: 8

Material Safety Data Sheet
Isobutyl Alcohol

Section 1 - Chemical Product and Company Identification

MSDS Name:

Isobutyl Alcohol

Catalog Numbers:

AC412650040, AC412650200, AC412660040, A397 1, A397 4, A397-1, A397-4, A397J4, S76776, S79932

Synonyms:

1-Hydroxymethylpropane; Isobutanol; Isopropylcarbinol; 2-Methyl-1-Propanol.

Company Identification:

Fisher Scientific - Fairlawn
Fairlawn, NJ 07410

Company Phone Number:

(201) 796-7100

Emergency Phone Number:

(201) 796-7100

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ELINCS
78-83-1	ISOBUTYL ALCOHOL	>98	201-148-0

Hazard Symbols: F XN

Risk Phrases: 10 20

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless

Warning! Flammable liquid and vapor. May cause skin irritation. May cause respiratory and digestive tract irritation. May cause severe eye irritation and possible injury. May cause liver and kidney damage. May cause central nervous system depression. Flash Point: 82°F. Target Organs: kidneys, central nervous system, liver.

Potential Health Effects

Material Safety Data Sheet
Isobutyl Alcohol

Eye:

May cause severe eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin:

No information found.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause corneal abnormalities and loss of appetite and weight. May cause burning sensation in the chest.

Chronic:

Effects may be delayed.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Material Safety Data Sheet
Isobutyl Alcohol

NFPA Rating:

(estimated) Health: 1; Flammability: 3; Reactivity: 0

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

No information found.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
ISOBUTYL ALCOHOL	50 ppm TWA	50 ppm TWA; 150 mg/m3 TWA 1600 ppm IDLH	100 ppm TWA; 300 mg/m3 TWA

OSHA Vacated PELs

ISOBUTYL ALCOHOL: 50 ppm TWA; 150 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Material Safety Data Sheet
Isobutyl Alcohol

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	colourless
Odor:	mild odor
pH:	No information found.
Vapor Pressure:	12.2 mm Hg @ 25C
Vapor Density:	2.6 (air=1)
Evaporation Rate:	0.8 (butyl acetone=1)
Viscosity:	4 CP @ 20C
Boiling Point:	226°F (107.78°C)
Freezing/Melting Point:	-162°F (-107.78°C)
Autoignition Temperature:	780°F (415.56°C)
Explosion Limits:	Lower: 1.7 Upper: 10.6
Flash Point:	82°F (27.78°C)
Decomposition Temperature:	No information found.
Solubility in water:	Soluble in water.
Specific Gravity/Density:	0.802 (water=1)
Molecular Formula:	C4H10O
Molecular Weight	74.0694

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures, incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 78-83-1: NP9625000.

Material Safety Data Sheet
Isobutyl Alcohol

LD50/LC50:

CAS# 78-83-1:
Oral, rat: LD50 = 2460 mg/kg
Skin, rabbit: LD50 = 3400 mg/kg.

Carcinogenicity:

CAS# 78-83-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found.

Teratogenicity:

No information found.

Reproductive:

No information found.

Mutagenicity

No information found.

Neurotoxicity

No information found.

Other:

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity:

Fish: Fathead Minnow: 1430g/L; 96H;
Fish: Fathead Minnow: 1430g/L; 96H;

Environmental:

Terrestrial: When spilled on soil, isobutyl alcohol will both evaporate and leach into the ground due to its relatively high vapor pressure and low adsorption to soil. Aquatic: When released into water, isobutyl alcohol will volatilize (half-life in a river approximately 4 days). Atmospheric: When released into the atmosphere, isobutyl alcohol will photodegrade with a half-life ranging from hours in polluted urban atmospheres, to days in cleaner atmospheres.

Physical:

Readily biodegrades but not bioconcentrate.

Other:

For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40CFR Parts 261.3.
Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

None of the components are on this list.

RCRA U Series Wastes

CAS# 78-83-1: waste number U140; (Ignitable waste, Toxic waste).

Material Safety Data Sheet
Isobutyl Alcohol

Section 14 - Transport Information

	US DOT	Canadian TDG
Proper Shipping Name:	BUTANOLS	BUTANOLS
Hazard Class:	3	3
UN Number:	UN1120	UN1120
Packing Group:	III	III

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 78-83-1 is listed on the TSCA Inventory.

Health and Safety Reporting List

CAS# 78-83-1: Effective Date: March 7, 1986; Sunset Date: March 7, 1996

Chemical Test Rules

TSCA Section 12b

CAS# 78-83-1: 4/12b

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

SARA Reportable Quantities (RQ)

CAS# 78-83-1: final RQ = 5000 pounds (2270 kg)

SARA Threshold Planning Quantities (TPQ)

None of the components are on this list.

SARA Hazard Categories

CAS# 78-83-1: flammable.

CERCLA/SARA Section 313

None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

Material Safety Data Sheet
Isobutyl Alcohol

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

ISOBUTYL ALCOHOL can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations

CAS# 78-83-1: No information found.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols: XN F
Risk Phrases: R 10 Flammable.
R 20 Harmful by inhalation.
Safety Phrases:
S 13 Keep away from food, drink and animal feeding stuffs.
S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 33 Take precautionary measures against static discharges.
S 37/39 Wear suitable gloves and eye/face protection.
S 46 If swallowed, seek medical advice immediately and show this container or label.
S 7/9 Keep container tightly closed and in a well-ventilated place.
S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 78-83-1: 1

United Kingdom Occupational Exposure Limits

CAS# 78-83-1: OES-United Kingdom, STEL 75 ppm STEL; 231 mg/m3 STEL

Canadian DSL/NDSL

CAS# 78-83-1 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product has a WHMIS classification of B2, D2B.

Canada Ingredient Disclosure List

CAS# 78-83-1 is listed on Canada's Ingredient Disclosure List.

Material Safety Data Sheet
Isobutyl Alcohol

Exposure Limits

CAS# 78-83-1: OEL-AUSTRALIA:TWA 50 ppm (150 mg/m3)
OEL-AUSTRIA:TWA 100 ppm (300 mg/m3)
OEL-BELGIUM:TWA 50 ppm (152 mg/m3)
OEL-DENMARK:STEL 50 ppm (150 mg/m3);Skin
OEL-FRANCE:TWA 50 ppm (150 mg/m3)
OEL-GERMANY:TWA 100 ppm (300 mg/m3)
OEL-JAPAN:TWA 50 ppm (150 mg/m3)
OEL-THE NETHERLANDS:TWA 50 ppm (150 mg/m3)
OEL-THE PHILIPPINES:TWA 100 ppm (300 mg/m3)
OEL-RUSSIA:TWA 50 ppm;STEL 10 mg/m3;Skin
OEL-SWITZERLAND:TWA 50 ppm (150 mg/m3);STEL 100 ppm (300 mg/m3)
OEL-UNITED KINGDOM:TWA 50 ppm (150 mg/m3);STEL 75 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Other Information

No information found.
MSDS Creation Date: December 12, 1997
Revision Date: February 19, 2001

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if Fisher has been advised of the possibility of such damages.

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Antifreeze / Oil

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Antifreeze / Oil

Area of Generation: Maintenance Shop Area

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid material generated from changing antifreeze in plant vehicles. Material contaminated with Oil. 50/50 mixture

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093...) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☒ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: D008 Characteristic for Lead

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Safety Kleen

5/15/1999

81363-R4845 PREQUALIFICATION EVALUATION PAGE 1 OF 4
OTI RECOVERY SERVICE COMPLETED: 04/05/99
O SERVICES COLLECTION REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1910758-3
DAVENPORT LAB #: 9910758-1
SURVEY #: 2076339

GENERATOR INFORMATION: CUSTOMER NUMBER: 5047-01-5062

CLIMAX MOLYBDENUM CO
2598 HWY 61 SOUTH
FORT MADISON, IA 52627

ATTN: SHELLY HESTON

BRANCH: 504701 - DAVENPORT

GENERAL DESCRIPTION: ANTIFREEZE AND OIL
NATURE OF BUSINESS: PLASTICS S.I.C.: STATUS:
FEDERAL EPA ID: IAD000222653 STATE ID(S):

FACILITY ADDRESS:	BILLING ADDRESS:
2598 HWY 61 SOUTH	PO BOX 172288
FORT MADISON, IA 52627	DENVER, CO 80217

PROCESS DESCRIPTION: VEHICLE MAINT.
GENERATION AMOUNT: 55 GALLONS YEARLY PART#:
P.O. #: DATE SURVEY SIGNED: 03/24/99
CONTACT: SHELLY HESTON TITLE: SUPERVISOR PHN: 319-463-2224

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

81363-R4845 PREQUALIFICATION EVALUATION PAGE 2 OF 4
OIL RECOVERY SERVICE COMPLETED: 04/05/99
OIL SERVICES COLLECTION REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

CONTROL #: 1910758-3
BRANCH/SUBMITTER: 504701 LAB #: 9910758-1
DAVENPORT SURVEY #: 2076339

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP PART NUMBER: 0087100 WASTE,SPEC FUEL 55-1
REVIEW DATE: 03/30/1999 REVIEWERS: RBU KAW

APPROVED FACILITIES:

	SAFETY-KLEEN SYSTEMS, INC.	SAFETY-KLEEN SYSTEMS, INC.
	1722 COOPER CREEK ROAD	633 E 138TH ST
	DENTON, TX 76208	DOLTON, IL 60419
FED EPA#:	TXD077603371	ILD980613913
STATE EPA#:	65124	0310690006
TELEPHONE:	9404835200	7088494850
STATE AUTH:		

APPROVED DOT - SHIPPING DESCRIPTION
0001160 DRUM OR BULK RQ HAZARDOUS WASTE, LIQUID, N.O.S. (LEAD)
9 NA3082 PG III (D008)(ERG#171)

STATE/PROV. CODES: TX OUTS205H
US EPA WASTE CODES: D008
USA

REVIEW COMMENTS:

****
* THIS WASTE MUST BE SHIPPED IN "X, Y OR Z" DOT RATED CONTAINERS.
*
* OK FOR FUEL. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE
* EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM
* THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.
****

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

CONTINUED ON NEXT PAGE

81363-R4845 PREQUALIFICATION EVALUATION PAGE 3 OF 4
[redacted] RECOVERY SERVICE COMPLETED: 04/05/99
[redacted] SERVICES COLLECTION REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701 CONTROL #: 1910758-3
DAVENPORT LAB #: 9910758-1
SURVEY #: 2076339

GENERAL ANALYSIS OF TOTAL SAMPLE

COLOR	:	BROWN GREEN
WATER CONTENT	:	50.0 WT%
NON-VOLATILE RESIDUE	:	20.0 WT%
FLAMMABILITY	:	NO FLASH AT 140 F BY SETAFLASH
FLAMMABILITY	:	NO FLASH AT 200 F BY SETAFLASH
PH	:	DIRECT BY METER 7.5
RADIOACTIVITY	:	NONE DETECTED

COMMENTS: FLAMMABILITY AT 200 F: NO FLASH NON-VOLATILE RESIDUE

FUEL EVALUATION OF TOTAL SAMPLE

HEAT CONTENT	:	9020 BTU/LB	ASH UPON COMBUSTION	:	< 1.0 WT%
TOTAL BROMINE	BR:	< 0.1 WT%	TOTAL CHLORINE	CL:	< 0.1 WT%
TOTAL FLUORINE	FF:	< 0.1 WT%	TOTAL SULFUR	FS:	0.3 WT%

COMMENTS: CL: <0.021 WT.%

METALS CONTENT OF TOTAL SAMPLE (PPM):

		BY:					
SILVER	(D011)	AG:	< 2.3	ARSENIC	(D004)	AS:	< 23
BARIUM	(D005)	BA:	< 92	BERYLLIUM		BE:	< 4.6
CADMIUM	(D006)	CD:	< 6.9	COBALT		CO:	< 6.9
CHROMIUM	(D007)	CR:	< 4.6	COPPER		CU:	9.5
IRON		FE:	59	MERCURY	(D009)	HG:	< 23
MAGNESIUM		MG:	< 12	MANGANESE		MN:	< 4.6
NICKEL		NI:	< 9.2	PHOSPHORUS		P :	460
LEAD	(D008)	PB:	33	ANTIMONY		SB:	< 34
SELENIUM	(D010)	SE:	< 46	SILICON		SI:	< 92
TITANIUM		TI:	< 4.6	THALLIUM		TL:	< 69
VANADIUM		V :	< 4.6	ZINC		ZN:	< 23

GENERAL COMPOSITION: COMPOSITION BY:	APPEARANCE (VOL%)	TOTAL (WT%)
AQUEOUS PHASE (FREE WATER)	0.0	0.0
ORGANIC PHASE (FEEDSTOCK)	99.0	100.0
BOTTOM SLUDGE (SEMISOLIDS)	0.0	0.0
BOTTOM SOLID (SETTLED SOLIDS)	0.0	0.0
TOTAL	100.0	100.0

TOTAL PHASE SPECIFIC GRAVITY: VISCOSITY (CENTIPOISE): < 50 CPS

SPECIFIC COMPOSITION OF TOTAL SAMPLE COMPOSITION OF:	TOTAL SAMPLE (WT%)	TOTAL SAMPLE (WT%)
WATER CONTENT	50.0	50.0
NON-VOLATILE RESIDUE	20.0	20.0
VOLATILE ORGANICS BY DIFFERENCE	30.0	30.0
TOTAL	100.0	100.0

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

81363-R4845 PREQUALIFICATION EVALUATION PAGE 4 OF 4
RECOVERY SERVICE COMPLETED: 04/05/99
SERVICES COLLECTION REVISED:
RUN: 04/06/99

ACCEPT FOR SHIPMENT

BRANCH/SUBMITTER: 504701
DAVENPORT

CONTROL #: 1910758-3
LAB #: 9910758-1
SURVEY #: 2076339

VOLATILE ORGANIC COMPOSITION OF TOTAL SAMPLE BY GAS CHROMATOGRAPHY
SAMPLE PREPARATION METHODS: METHANOL-EXTRACT
DETECTION METHODS : FID

COMPOUND NAME	COMPOSITION OF: VOLATILE ORGANICS (WT%)	TOTAL SAMPLE (WT%)
ETHYLENE GLYCOL CODE: EG CAS NUMBER: 107-21-1	100.0	30.0
TOTAL	100.0	30.0

SPECIFIC ORGANIC COMPOSITION
POLYCHLORINATED BIPHENYLS (PCBS): NONE DETECTED < 1 PPM AROCHLOR:

THE ANALYSIS CONTAINED HEREIN ARE PERFORMED SOLELY FOR THE PURPOSE OF QUALIFYING THE ANALYZED MATERIALS FOR ACCEPTANCE BY SAFETY-KLEEN CORP. IN ACCORDANCE WITH ITS PERMITS AND PROCESSING CAPABILITIES.

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE IS REQUIRED.

*** ACCEPT FOR SHIPMENT

END OF DOCUMENT

EOG
EOG Environmental, Inc.
5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223
(414) 353-1156 1-800-234-1156 WID988580056

WS Number: _____
Approval #: _____

Generator Name: Climax Molybdenum Co. Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft. Madison, IA 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Transportatio Coordinator
Telephone: (319) 463-7151 Ext. _____ FAX #: (319) 463-7159 Phone Number: 319-524-8273 FAX #319-524-9019
EPA ID: IAD000222653 This profile sheet was completed using: ■ General Knowledge □ Analysis (attached) ■ MSDS □ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS

Name of Waste: Parts Washer/Cleaner/Molybdenum (iv) Sulfide/Absorbents
Process Generating Waste: Spill Cleanup
Color: _____ Odor: _____ □ None ■ Mild □ Strong ■ Single Layer □ Double Layer □ Multi-Layer
Free Phases: ____ ■ Liquid 1-2 % □ Powder _____ % ■ Solid 98-99 % □ Sludge _____ %

C. RCRA AND DOT INFORMATION

Is this a USEPA Hazardous Waste? □ Yes ■ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? □ Yes ■ No Anticipated Annual Volume: 55 / Units: Gal.
Proper Shipping Name: Non-Regulated Material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1x55g
Method of Shipment: □ Bulk Liquid □ Bulk Solid ■ Drum Container Type: DM Size: 55

D. SPECIAL HANDLING INSTRUCTIONS

If Special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? □ Yes ■ No

E. METALS (Indicate in parts per million [ppm] if this waste contains any of the following using): □ TCLP ■ Generator Knowledge □ TOTAL

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	■ <5 □ <500		Mercury	■ <0.2 □ <20		Nickel	■ <5 □ <134	
Barium	■ <100		Selenium	■ <1 □ <100		Thallium	■ <5 □ <130	
Cadmium	■ <1 □ <100		Silver	■ <5		Zinc	■ <5	
Chromium	■ <5		Chromium-Hex	■ <5 □ <500				
Lead	■ <5 □ <500		Copper	■ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	□ <0.8	□ 0.8-1.0	□ 1.0-1.2	□ 1.2-1.4	■ 1.4-1.7	□ >1.7	Actual:
Total Suspended Solids:		□ 0.5	□ 0.5-2.0	□ 2.0-5.0	□ 5.0-20	■ >20	Actual:
pH:	□ <2	□ 2-6	■ 6-8	□ 8-10	□ 10-12.5	□ >12.5	Actual:
BTU's:	□ <1	■ 1-4	□ 4-8	□ 8-12	□ 12-16		Actual:
Flash Point (Closed Cup):		□ <73°F	□ 73-140°F	□ >140-200°F	■ >200°F		Actual:
Sulfur (% WT):		■ <0.5	□ 0.5-2.0	□ 2-5	□ >5.0		Actual:

G. HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS

Reactivity: ■ None □ Explosive □ Pyrophoric □ Shock Sensitive □ Water Reactive □ Etiological □ Radioactive □ Acutely Hazardous Waste
Viscosity: □ Low ■ Medium □ High Are TC Codes present? □ Yes ■ No (If yes, please list in USEPA Waste Code Section).
Halogens: □ 0 % Chlorine □ 0 % Fluorine □ 0 % Bromine □ 0 % Iodine
Cyanides (ppm) 0 PCB's (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm): 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Cloth Pigs	95-97%		%		%		%
For Best Sea Wash	1-2 %		%		%		%
Cleaner	1-2 %		%		%		%
Molybdenum	1-2 %		%		%		%
	%		%		%		%
	%		%		%		%

I certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to assist EOG Environmental, Inc., as Generator's agent for disposal of waste. Accordingly Generator specifically authorizes officers and/or employees of EOG Environmental Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and manners that appear on the EOG Environmental "master sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employees of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X Shelly Heston — SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT
X Environmental Mgr — TITLE
May 2, 2000 — DATE

Post-it Fax Note 7671 | Date 4/28/06 | # of pages 2
To Richard Albert | From E.A. Forbes
Co./Dept. | Co.
Phone # | Phone #
Fax # 318-463-7315 | Fax #

Material Safety Data Sheet

ForBest™ SeaWash®-700

pH-Neutral Parts Washer Formulation

Revision: 7 Date: January, 1999

Hazardous Material Identification Rating:
Fire - 0 Health - 0 Reactivity - 0

SECTION 1: PRODUCT IDENTIFICATION

Identity (Trade Name):	*ForBest* **SeaWash-700** Aqueous Cleaning Solution
Part Number:	SW-700
Family / Chemical Name:	Non-Ionic Surfactants with Rust Inhibitor
Chemical Formulation:	Proprietary
Product Use:	Cleaning and degreasing of metal parts.
Exclusive Distributor:	ForBest Cleaning Solutions, Inc. LBTC, S. Stadium Dr., #124, Baton Rouge, LA 70803-6100 Phone: (225) 334-6990 FAX: (225) 334-3441
Manufacturer:	Warren Chemical Corp. 25463 Hwy. 190, Robert, LA 70455
Emergency Phone No.:	**(504) 542-8985 (Warren Chemical Corp.)**

SECTION 2: HAZARDOUS INGREDIENTS

None per OSHA 29 CFR 1910.1000 & OSHA 29 CFR 1910.1200

SECTION 3: PHYSICAL DATA (Concentrate

Specific Gravity:	1.083	**Form:**	Liquid
Appearance:	Light Golden	**pH:**	6.8 - 7.5
Odor:	Slight Rose	**Flash Point:**	None
Solubility in Water:	Infinite	**Boiling Point:**	210 °F

SECTION 4: FIRE AND EXPLOSION DATA

ForBest **SeaWash-700** is non-flammable and will not support combustion.

SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with running water.
Ingestion: Seek medical attention.
Skin: Flush with cool running water.
Inhalation: Leave the area for fresh air.

SECTION 6: PERSONAL PROTECTIVE DATA

Required Protective Equipment: None
Recommended Protective Equipment: Splash-proof goggles and gloves (common sense dictates that protective wear is appropriate when there is prolonged contact on a continuous basis).

SECTION 7: TOXICOLOGICAL PROPERTIES

None Known

SECTION 8: REACTIVITY DATA

Hazardous Decomposition Products:	None Known
Stability:	Stable
Materials to Avoid:	None Known
Conditions to Avoid:	None Known
Hazardous Ploymerization:	None

SECTION 9: SPILL AND DISPOSAL MEASURES

Spill and Recovery: *ForBest* **SeaWash-700** is biodegradable. If spilled, flush area thoroughly with water.
Waste Disposal Method: *ForBest* **SeaWash-700** is not regulated under any federal regulations as a toxic or hazardous material (see below). When used in *ForBest* Integrated Parts Cleaning (IPC™) Systems in typical parts cleaning applications, the solution is biologically cleaned in the system and never requires disposal; however, if it ever becomes necessary to dispose of spent solution, foreign, potentially-regulated contaminants from the parts cleaning process are introduced to the system in the cleaning process and applicable local, state, and federal regulations pertaining to characterization and disposal should be adhered to.

SECTION 10: TRANSPORATION DATA

DOT Class:	Non-Regulated
Hazard Class:	None
UN / UNA Number:	None
IMO / IATA:	Surfactant

SECTION 11: REGULATORY INFORMATION

Federal Regulations

29 CFR 1910.1000:	None
CERCLA/SUPERFUND 40 CFR 117, 302, 304:	Notification of spills is *not* required
SARA/SUPERFUND Amendments and Reauthorization Act of 1986 (Title III - Sections 302, 311, 312, 313):	Contains no ingredients listed in Appendix A per Section 302. Not hazardous under Sections 311 and 312. Not reportable under Section 313.
RCRA:	Not Applicable
Total Toxic Organics:	None Per TTO List

Local Regulations

SCAQMD Rule 1171:	Certified by SCAQMD as a Clean Air Solvent and therefore exempt from provisions of the Rule.

No representations or warranties either expressed or implied of fitness for a particular purpose or any other nature are made here with respect to the information contained herein on the chemical listed above. All information presented in this document has been provided by the manufacturer, Warren Chemical Corp., who holds the formulation as a proprietary trade secret. As such, any and all claims made in this regard are by Warren Chemical Corp. exclusively.

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ACC# 84738

Print Date: 4/12/2000
Revision Date: Original.
Version: 0

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Section 1 - Chemical Product and Company Identification

MSDS Name:

Molybdenum(iv) sulfide, 98.5%

Catalog Numbers:

21.578.44, AC215780000, AC215780050, AC215781000, AC215785000, 215780050

Synonyms:

Molybdenum disulfide; DAG 325; Molykote; Mopol M; Mopol S

Company Identification:

Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel
Belgium

Company Phone Number:

0032(0)14575211

Emergency Phone Number:

0032(0)14575299

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ELINCS
1317-33-5	Molybdenum(IV) sulfide	98.5	215-263-9

Hazard Symbols:
Risk Phrases:

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: dark gray
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: none.

Potential Health Effects

Eye:

Dust may cause mechanical irritation. The toxicological properties of this material have not been fully investigated.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Skin:

May cause skin irritation. The toxicological properties of this material have not been fully investigated.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

Dust is irritating to the respiratory tract. The toxicological properties of this substance have not been fully investigated.

Chronic:

No information found.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

NFPA Rating:

(estimated) Health: ; Flammability: ; Reactivity:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Molybdenum(IV) sulfide	soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds, as Mo: 10 mg/m3 TWA (listed under ** no name **)	as Mo: no established RELs - see Appendix D (listed under ** no name **) as Mo: 5000 mg/m3 IDLH (Molybdenum soluble compounds: 1000 mg/m3 IDLH) (listed under ** no name **)	soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds (total dust), as Mo: 15 mg/m3 TWA (listed under ** no name **)

OSHA Vacated PELs

Molybdenum(IV) sulfide soluble compounds, as Mo: 5 mg/m3 TWA; insoluble compounds (total dust), as Mo: (listed under ** no name **)

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: dark gray
Odor: None reported.
pH: No information found.
Vapor Pressure: No information found.
Vapor Density: 5.51
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: 2375°C (4,307.00°F)
Autoignition Temperature: No information found.
Explosion Limits: Lower: Upper:
Flash Point: No information found.
Decomposition Temperature: No information found.
Solubility in water: Soluable in aqua regia and sulfuric acid
Specific Gravity/Density: No information found.
Molecular Formula: MoS2
Molecular Weight 160.07

Section 10 - Stability and Reactivity

Chemical Stability:
Stability unknown.

Conditions to Avoid:
Incompatible materials, dust generation, strong oxidants.

Incompatibilities with Other Materials
strong oxidizing agents, hydrogen peroxides, potassium nitrate.

Hazardous Decomposition Products
Oxides of sulfur, hydrogen sulfide, oxides of molybdenum.

Hazardous Polymerization
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 1317-33-5: QA4697000.

LD50/LC50:
CAS# 1317-33-5:
No information found.

Carcinogenicity:
CAS# 1317-33-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive:
No information available.

Mutagenicity
No information found.

Neurotoxicity
No information found.

Other:
See actual entry in RTECS for complete information.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA P Series Wastes
None of the components are on this list.

RCRA U Series Wastes
None of the components are on this list.

Section 14 - Transport Information

US DOT

Shipping Name: No information found.
Hazard Class:
UN Number:
Packing Group:

Canadian TDG

No information found.

Section 15 - Regulatory Information

US Federal

TSCA
CAS# 1317-33-5 is listed on the TSCA Inventory.

Health and Safety Reporting List
None of the components are on this list.

Chemical Test Rules
None of the components are on this list.

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

SARA Reportable Quantities (RQ)

None of the components are on this list.

SARA Threshold Planning Quantities (TPQ)

None of the components are on this list.

SARA Hazard Categories

None of the components are on this list.

CERCLA/SARA Section 313

None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

Molybdenum(IV) sulfide can be found on the following state Right-to-Know lists: California, (listed as ** undefined **), New Jersey, Florida, (listed as ** undefined **), Pennsylvania, (listed as ** undefined **), Minnesota, (listed as ** undefined **), Massachusetts.

California Regulations

CAS# 1317-33-5: No information found.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols:
Risk Phrases:
Safety Phrases:
S 22 Do not breathe dust.
S 24/25 Avoid contact with skin and eyes.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 37 Wear suitable gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Material Safety Data Sheet
Molybdenum(iv) sulfide, 98.5%

S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 1317-33-5: 0

United Kingdom Occupational Exposure Limits

CAS# 1317-33-5: OES-United Kingdom, STEL (listed as ** undefined **): soluble compounds, as Mo: 10 mg/m3 STEL; insoluble compounds, as Mo: 20 mg/m3 ST

Canadian DSL/NDSL

CAS# 1317-33-5 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product has a WHMIS classification of Not controlled..

Canada Ingredient Disclosure List

CAS# 1317-33-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

Section 16 - Other Information

MSDS Creation Date: September 9, 1998
Revision Date: Original. Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

MATERIAL SAFETY DATA SHEET

HMIS Rating: Health 1 Flammability 0 Reactivity 0

IDENTITY (As Used on Label and List)
HANDI-WAY SPRAY CLEANER
C-1975 & C-2000

Note: Blank Spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name: Handi-Clean Products, Inc
Address: 301 Swing Road, Greensboro, NC 27409
Emergency Telephone Number: (336) 292-3083 After 5:00 p.m. (336) 454-3662
Telephone Number for Information: (336) 292-3083
Date Prepared: 7-23-98

Section II - Hazardous Ingredients/Identity Information

	CAS NO.	OSHA PEL	ACGIH TLV	% (optional)
Isopropyl Alcohol	67-63-0	10mg/m3	400ppm	
Sodium Metasilicate	6834-92-0	10mg/m3		
Sodium Tetraborate Decohydrate	1303-96-4	5mg/m3		

Section III - Physical/Chemical Characteristics (ON CONCENTRATE)

Boiling Point Approx	209°F	Specific Gravity (H2O = 1)	1.035	Appearance	Green Liquid
Vapor Pressure (mm Hg.)	25.8	Evaporation Rate		Odor	Sassafrass
Vapor Density (AIR = 1)@20°C	1.22	(Butyl Acetate = 1)	N.D.	Solubility In Water	Complete

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) None at Boil | **Flammable Limits** A.I. 462°F | **LEL** 2.1 | **UEL** 10.8
Extinguishing Media: N.A.
Special Fire Fighting Procedures: N.A.
Unusual Fire and Explosion Hazards: N.A.

Section V - Reactivity Data

Stability: Stable [X] Unstable [ ] **Conditions to Avoid** None
Incompatibility (Materials to Avoid) Avoid mixing with acids.
Hazardous Decomposition or Byproducts None

Hazardous Polymerization	May Occur		Will Not Occur	X	Conditions to Avoid

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X
Health Hazards (Acute and Chronic) Eye contact may cause irritation. Reddening of skin; itching eyes; Dizziness

Emergency and First Aid Procedures SKIN: Wash with soap and water. EYES: Flush with water using 1% Boric Acid Solution for 15 minutes. Call physician. INGESTION: Drink large volume of water and induce vomiting. Call physician immediately. INHALATION: Remove to fresh air.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken In Case Material Is Released or Spilled: Wipe up and rinse residual down drain.
Waste Disposal Method: Dispose in accordance with local, state and federal regulations.
Precautions to Be Taken in Handling and Storing: Store in cool place away from acids and direct sunlight.
Other Precautions KEEP OUT OF REACH OF CHILDREN.

Section VIII - Control Measures

Respiratory Protection (Specify Type) None Required | **Ventilation** Normal
Protective Gloves If desired | **Eye Protection** Safety Glasses
Other Protective Clothing or Equipment None Required
Work/Hygienic Practices Wash hands after using product

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Recycled paper, cardboard, wood

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Recycled materials

Area of Generation: Plant Wide

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid material. Paper is generated from offices throughout the plant. Wood is from pallets used to hold supersacks. Cardboard is from boxes or dividers used to support supersacks.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory ~~limit, proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Not USEPA hazardous waste

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: City Carton

revised 2/10/1999

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Miscellaneous Waste Paint

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Waste Paint

Area of Generation: Plant Maintenance

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid waste paint. Generated from plant maintenance during painting of facility for up keep. Contains Xylenes, Toluenes, possibly lead.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
  None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☒ Liquid with a flashpoint < 140°F
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- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

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California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2.~~ Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Contains xylenes, toluenes, possibly lead and is ignitable

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EQ6 Facility

5/24/2001

EOG Environmental, Inc.
5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID98850056

A. Generator Name: Climax Molybdenum Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft Madison, Iowa 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Trans. Coordinator
Telephone: 319-463-2224 Ext. _____ Fax #: _____ Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Leaded Paint W/Solvent
Process Generating Waste: Clean-up
Color: _____ Odor: _____ ☐ None ☒ Mild ☐ Strong ☐ Single Layer ☒ Double Layer ☐ Multi-Layer
Free Phases _____ ☒ Liquid 95 % ☐ Powder _____ % ☐ Solid 5 % ☐ Sludge _____ %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☒ Yes ☐ No Please list the USEPA Hazardous waste codes: D001, D008, F003, F005
Is this a DOT Hazardous Material? ☒ Yes ☐ No Anticipated Annual Volume: 55-220 /Units: Gal
Proper Shipping Name: RQ Waste Paint Related Material
Hazardous Class #: 3 PG #: II UN/NA #: 1263 Additional Description: Toluene , Xylene
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1 X 55 G
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55 G

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Treatment: _____ Is a representative sample provided? ☐ Yes ☒ No

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using): ☐ TCLP ☒ Generator Knowledge ☐ Total

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500		Mercury	☒ <0.2 ☐ <20		Nickel	☒ <5 ☐ <134	
Barium	☒ <100		Selenium	☒ <1 ☐ <100		Thallium	☒ <5 ☐ <130	
Cadmium	☒ <1 ☐ <100		*Silver*	☒ <5		Zinc	☒ <5	
Chromium	☒ <5		Chromium-Hex	☒ <5 ☐ <500				
Lead	☐ <5 ☒ <500		Copper	☒ <5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☒ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☐ <1.4-1.7	☐ >1.7 Actual:
Total Suspended Solids:		☒ 0.5	☐ 0.5-2.0	☐ *2.0-5.0*	☐ 5.0-20	☐ >20 Actual:
pH:	☐ <2	☐ 2-6	☐ 6-8	☒ 8-10	☐ 10-12.5	☐ >12.5 Actual:
BTU's:	☐ <1	☒ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:
Flash Point (Closed cup):		☐ <73°F	☒ 73-140°F	☐ >140-200°F	☐ >200°F	Actual:
Sulfer (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Etiological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☒ Low ☐ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCB's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Paint Pigments	5-10	%		%		%		%		%	
Xylene	40-50	%		%		%		%		%	
Toluene	40-50	%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	
		%		%		%		%		%	

I hereby certify that all information submitted in this and all documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts as respect to waste disposal utilizing only information and manners that appear on the EOG Environmental "master Sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officers and/or employees of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

x Shelly Heston x Env. Manager x 5/24/2001
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Used Acetone

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Used Acetone

Area of Generation: Quality Control Laboratory

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

liquid Used Acetone from laboratory analysis.
See Attached profile

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION
FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)
This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- [X] It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** F003
- [ ] It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- [ ] It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- [ ] The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- [ ] The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- [X] It is **not** a listed waste under the "P" or "U" listed waste codes.
- [ ] None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)
- ☒ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)
- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)
- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Ignitable

Reasoning: _____

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EOG Facility, Safety Kleen

Original 2/1/1998

revised 9/16/1999

5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223
(414) 353-1156 1-800-234-1156
WID988580056
EOG Environmental, Inc.

WS Number: 3155-0

SECTION A - GENERAL INFORMATION

Generator Name: Climax Molybdenum # 3155 Bill to: Lori Seabold
Address: 2589 Hwy 61 SIC #: HEI Consultants
City, State, Zip: Ft. Madison IA 52627 P.O. Box 1472
Contact: Shelly Heston Keokuk IA 52632
Telephone: (319) 463-2224 Ext. 0000 FAX #: (319) 463-7159 Ext
EPA ID: IAD000222653 This profile sheet was completed using: Generator Knowledge

SECTION B - WASTE DESCRIPTION AND GENERAL CHARACTERISTICS

Name of Waste: Spent Acetone
Process Generating Waste: Lab testing
Color: Clear Odor: Solvent, Mild WS Layer: Single Free Phases:
Consistency Liquid: 100 % Powder: % Solid: % Sludge: % Approval # 19991164

SECTION C - RCRA AND DOT INFORMATION

IS THIS A USEPA HAZARDOUS WASTE?Y IS THIS A DOT HAZARDOUS MATERIAL? Y Anticipated Annual Volume: 55-110 Units: gal
USEPA HAZARDOUS WASTE CODES: D001,
Proper Shipping Name: RQ Waste Acetone
Hazard Class: 3 ID #: UN1090 PG No: II Additional Description:
CERCLA Reportable Quantity (RQ): 100 Volume on hand: 1x55 Shipment Method: Drum Drum Size/Type: 0/ DM

SECTION D - SPECIAL HANDLING INSTRUCTIONS

Treatment Method Fuel Blending
Special Handling: Proper PPE Required
Is a sample provided? N

SECTION E - METALS

This waste contains the following metals based on Generator Knowledge

METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL	METAL:	LESS THAN or ACTUAL
Arsenic:	<5	Mercury:	<0.2	Nickel:	<5
Barium:	<100	Selenium:	<1	Thalium:	<5
Cadmium:	<1	Silver:	<5	Zinc:	<5
[redacted]dium:	<5	Chromium-Hex:	<5		
Lead:	<5	Copper:	<5		

ALL are (parts per million)

SECTION F - PHYSICAL/CHEMICAL PROPERTIES

	EST.	Actual:		EST.	Actual:
Specific Gravity:	0.8 - 1.0		BTU:	8-12	
Total Suspended Solids:	<0.5		Flash Point Degrees F.:	73-140	
pH:	6-8		Sulfur (%WT):	<0.5	

SECTION G - HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS

Treatment Method: Fuel Blending
Reactivity: None
Viscosity: Low Are TC Codes Present? (If yes, see USEPA Codes.)
Halogens (ppm's) Chlorine: 0 Bromine: 0 Fluorine: 0 Iodine: 0
Cyanides (ppm's): 0 PCB'S (ppm's): 0 Pesticides: 0 Sulfides (ppm's): 0 Phenolics 0

SECTION H - CHEMICAL COMPOSITION (must total 100%)

acetone	90	%		%		%	
mineral oil	0-2	%		%		%	
isobutyl alcohol	0-2	%		%		%	
methyl isobutyl alcohol	0-2	%		%		%	
ethyl alcohol	0-2	%		%		%	
molybdenum	0-2	%		%		%	
		%		%			

I hereby certify that all information submitted in this and all attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name EOG Environmental, Inc., as Generator's agent for disposal of waste. Accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "master sheet" above. In this respect, EOG Environmental, Inc., is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

Shelly Heston Environmental Mgr X 10/17/00
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

Fisher Scientific

Print Date: 3/10/2003
Revision Date: 3/19/2001
Version: 9

Material Safety Data Sheet

Acetone

Section 1 - Chemical Product and Company Identification

MSDS Name:

Acetone

Catalog Numbers:

A11-1, A11-20, A11-200, A11-4, A11S-4, A16F-1GAL, A16P-4, A16S-20, A16S-4, A16S20001, A16S4LC, A18-1, A18-20, A18-200, A18-4, A18-500, A18200001, A18200LC, A1820LC, A1820LOT003, A184LC, A184LOT001, A18CU1300, A18J500, A18P-4, A18P4, A18RB115, A18RB19, A18RB200, A18RB50, A18RS115, A18RS200, A18RS28, A18RS50, A18S-4, A18SK-4, A18SK4LC, A18SS-115, A18SS-200, A18SS-30, A18SS-50, A19-1, A19-4, A20-1, A40-4, A404LOT007, A404LOT008, A404LOT009, A928-4, A929-1, A929-4, A9294LC, A9294LOT001, A9294LOT012, A9294LOT014, A9294LOT017, A9294LOT018, A9294LOT019, A9294LOT021, A9294LOT022, A9294LOT024, A929J4, A929RS-115, A929RS-19, A929RS-200, A929RS-28, A929RS-50, A929SS-115, A929SS-200, A929SS-28, A929SS-50, A930-4, A946-4, A946FB200, A946RB115, A946RB19, A946RB200, A946RB50, A949-1, A949-4, A9494LOT004, A949CU50, A949J4, A949LC, A949RS115, A949RS19, A949RS200, A949RS28, A949RS50, A949SK-1, A949SK-4, A949SS-11, A949SS-115, A949SS-20, A949SS-200, A949SS-30, A949SS-50, BP24011, BP240320, BP24034, BP2403500, BP2404, BPA18-4, BPA946RB-115, BPA946RB-19, BPA946RB-200, BPA946RB-50, HC 300 1GAL, HC3001GAL, NC9475452, NC9475553, NC9614315, NC9631882, NC9743229, S118016, S254CA4, S70090, S70091, S70091-1, S70091HPLC, S70091SPEC, XXA181LI, XXA949U200LI

Synonyms:

Dimethylformaldehyde; Dimethyl ketone; 2-Propanone; Pyroacetic acid; Pyroacetic ether.

Company Identification:

Fisher Scientific - Fairlawn
Fairlawn, NJ 07410

Company Phone Number:

(201) 796-7100

Emergency Phone Number:

(201) 796-7100

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ELINCS
67-64-1	Acetone	99.0	200-662-2

Hazard Symbols: F XI

Risk Phrases: 11 36 66 67

Material Safety Data Sheet
Acetone

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless
Danger! Extremely flammable liquid and vapor. Vapor may cause flash fire. Causes eye and skin irritation. Causes respiratory tract irritation. May cause central nervous system depression. May cause liver and kidney damage. Flash Point: -4°F.
Target Organs: kidneys, central nervous system, liver, respiratory system, eyes, skin.

Potential Health Effects

Eye:

Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

Skin:

No information found.

Ingestion:

May cause irritation of the digestive tract. May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause liver and kidney damage. May cause motor incoordination and speech abnormalities.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Material Safety Data Sheet
Acetone

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Extremely flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

NFPA Rating:

(estimated) Health: 1; Flammability: 3; Reactivity: 0

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Wear appropriate protective clothing to minimize contact with skin. Remove all sources of ignition. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces. Clean up residual material by washing area with a 2-5% solution of soda ash.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

No information found.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Material Safety Data Sheet
Acetone

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Acetone	500 ppm TWA;750 ppm STEL	250 ppm TWA; 590 mg/m3 TWA 2500 ppm IDLH (10 percent lower explosive level)	1000 ppm TWA; 2400 mg/m3 TWA

OSHA Vacated PELs

Acetone: 750 ppm TWA; 1800 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	colourless
Odor:	acetone-like
pH:	7
Vapor Pressure:	180 mm Hg
Vapor Density:	2.0 (Air=1)
Evaporation Rate:	7.7 (n-Butyl acetate=1)
Viscosity:	No information found.
Boiling Point:	133.2°F (56.22°C)
Freezing/Melting Point:	-139.6°F (-95.33°C)
Autoignition Temperature:	869°F (465.00°C)
Explosion Limits:	Lower: 2.5 Upper: 12.8
Flash Point:	-4°F (-20.00°C)
Decomposition Temperature:	No information found.
Solubility in water:	Soluble.
Specific Gravity/Density:	0.79 (Water=1)
Molecular Formula:	C3H6O
Molecular Weight	58.08

Material Safety Data Sheet

Acetone

Section 10 - Stability and Reactivity

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

High temperatures, ignition sources, temperatures above 220°C.

Incompatibilities with Other Materials

strong oxidizing agents, strong acids, perchlorates, aliphatic amines, chromyl chloride, hexachloromelamine, chromic anhydride, chloroform + alkali, potassium tert-butoxide.

Hazardous Decomposition Products

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 67-64-1: AL3150000.

LD50/LC50:

CAS# 67-64-1:

Dermal, guinea pig: LD50 = >9400 uL/kg
Draize test, rabbit, eye: 20 mg Severe
Draize test, rabbit, eye: 20 mg/24H Moderate
Draize test, rabbit, skin: 500 mg/24H Mild
Inhalation, mouse: LC50 = 44 gm/m3/4H
Inhalation, rat: LC50 = 50100 mg/m3/8H
Oral, mouse: LD50 = 3 gm/kg
Oral, rabbit: LD50 = 5340 mg/kg
Oral, rat: LD50 = 5800 mg/kg.

Carcinogenicity:

CAS# 67-64-1

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Epidemiology:

No information available.

Teratogenicity:

No information found.

Reproductive:

TDLo(Oral, rat) = 273 gm/kg;Reproductive - Paternal Effects - spermatogenesis (incl. genetic material, sperm morphology, motility, and count).

Mutagenicity

Sex chromosome loss and nondisjunction(Yeast - Saccharomyces cerevisiae) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L.

Neurotoxicity

No information found.

Material Safety Data Sheet
Acetone

Other:

See actual entry in RTECS for complete information. Standard Draize Test: Administration onto the skin (human) = 500 mg/7days (Mild). Standard Draize Test: Administration onto the skin (rabbit) = 500 mg/24H (Mild). Standard Draize Test(Eye, Rabbit) = 20 mg; Severe.

Section 12 - Ecological Information

Ecotoxicity:

Material Safety Data Sheet Brown trout: ; ;

Rainbow trout LC50=5540 mg/L/96H
Sunfish (tap water), death at 14250 ppm/24H
Mosquito fish (turbid water) TLm=13000 ppm/48H
Cas# 67-64-1:
LC50 (96Hr.) rainbow trout = 5540 mg/L; Static conditions, 11-13 degrees C
LC50 (96Hr) Fathead Minnow = 7280-8120 mg/L; Flow-through Conditions
LC50 (96Hr) Bluegill = 8300 mg/L

Environmental:

Volatilizes, leeches, and biodegrades when released to soil. TERRESTRIAL FATE: If released on soil, acetone will both volatilize and leach into the ground. Acetone readily biodegrades and
there is evidence suggesting that it biodegrades fairly rapidly in soils. AQUATIC FATE: If released into water, acetone will probably biodegrade. It is readily biodegradable in screening tests, although
data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to sediment should not be significant.

Physical:

ATMOSPHERIC FATE: In the atmosphere, acetone will be lost by photolysis and reaction with photochemically produced hydroxyl
radicals. Half-life estimates from these combined processes are 79 and 13 days in January and June, respectively, for an overall
annual average of 22 days. Therefore considerable dispersion should occur. Being miscible in water, wash out by rain should be an
important removal process. This process has been confirmed around Lake Shinsei-ko in Japan. There acetone was found in the air and rain as well as the lake.

Other:

Not expected to bioconcentrate in fish. he recommended log octanol/water partition coefficient for acetone is -0.24 and therefore its potential for bioconcentration in fish is negligible. One experimental study of bioconcentration in adult haddock at 7-9 deg C (static test), resulted in a BCF of 0.69.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40CFR Parts 261.3.
Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

None of the components are on this list.

RCRA U Series Wastes

CAS# 67-64-1: waste number U002; (Ignitable waste).

Material Safety Data Sheet
Acetone

Section 14 - Transport Information

	US DOT	Canadian TDG
Proper Shipping Name:	ACETONE	ACETONE
Hazard Class:	3	3
UN Number:	UN1090	UN1090
Packing Group:	II	II

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 67-64-1 is listed on the TSCA Inventory.

Health and Safety Reporting List

None of the components are on this list.

Chemical Test Rules

None of the components are on this list.

TSCA Section 12b

CAS# 67-64-1: 4/12b

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

SARA Reportable Quantities (RQ)

CAS# 67-64-1: final RQ = 5000 pounds (2270 kg)

SARA Threshold Planning Quantities (TPQ)

None of the components are on this list.

SARA Hazard Categories

CAS# 67-64-1: acute, chronic, flammable, sudden release of pressure.

CERCLA/SARA Section 313

None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Material Safety Data Sheet
Acetone

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

Acetone can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations

CAS# 67-64-1: No information found.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols: XI F
Risk Phrases: R 11 Highly flammable.
R 36 Irritating to eyes.
R 66 Repeated exposure may cause skin dryness or cracking.
R 67 Vapors may cause drowsiness and dizziness.
Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 67-64-1: 0

United Kingdom Occupational Exposure Limits

CAS# 67-64-1: OES-United Kingdom, STEL 1500 ppm STEL; 3620 mg/m3 STEL

Canadian DSL/NDSL

CAS# 67-64-1 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product has a WHMIS classification of B2, D2B.

Canada Ingredient Disclosure List

CAS# 67-64-1 is listed on Canada's Ingredient Disclosure List.

Material Safety Data Sheet
Acetone

Exposure Limits

CAS# 67-64-1: OEL-AUSTRALIA:TWA 500 ppm (1185 mg/m3);STEL 1000 ppm
OEL-AUSTRIA:TWA 750 ppm (1780 mg/m3)
OEL-BELGIUM:TWA 750 ppm (1780 mg/m3);STEL 1000 pp
OEL-CZECHOSLOVAKIA:TWA 800 mg/m3;STEL 4000 mg/m3
OEL-DENMARK:TWA 250 ppm (600 mg/m3)
OEL-FINLAND:TWA 500 ppm (1200 mg/m3);STEL 625 ppm (1500 mg/m3)
OEL-FRANCE:TWA 750 ppm (1800 mg/m3)
OEL-GERMANY:TWA 1000 ppm (2400 mg/m3)
OEL-HUNGARY:TWA 600 mg/m3;STEL 1200 mg/m3
OEL-INDIA:TWA 750 ppm (1780 mg/m3);STEL 1000 ppm (2375 mg/m3)
OEL-JAPAN:TWA 200 ppm (470 mg/m3)
OEL-THE NETHERLANDS:TWA 750 ppm (1780 mg/m3) JAN9
OEL-THE PHILIPPINES:TWA 1000 ppm (2400 mg/m3)
OEL-POLAND:TWA 200 mg/m3
OEL-RUSSIA:TWA 200 ppm;STEL 200 mg/m3
OEL-SWEDEN:TWA 250 ppm (600 mg/m3);STEL 500 ppm (1200 mg/m3)
OEL-SWITZERLAND:TWA 750 ppm (1780 mg/m3)
OEL-TURKEY:TWA 1000 ppm (2400 mg/m3)
OEL-UNITED KINGDOM:TWA 750 ppm (1810 mg/m3);STEL 1250 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Other Information

No information found.
MSDS Creation Date: July 26, 1999
Revision Date: March 19, 2001

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if Fisher has been advised of the possibility of such damages.

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Parts Washer Solvent

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Parts Washer Solvent

Area of Generation: Maintenance Shop

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solvent. MSDS Attached. Used to wash maintenance parts. Spent solvent recycled by Safety Kleen

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☒ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION
FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**
This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☒ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F 148°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2.~~ Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). MSDS Attached

Reasoning: Material does not contain hazardous constituents nor is it flammable, toxic or corrosive.

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Safety Kleen

Original 2/23/96

revised 12/14/98

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

EYE PROTECTION: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

OTHER PROTECTIVE EQUIPMENT: Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, AND ODOR:	Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.
ODOR THRESHOLD:	30 ppm (based on Stoddard Solvent)
MOLECULAR WEIGHT:	Not available.
SPECIFIC GRAVITY:	0.78 to 0.82 at 60°F/60°F (15.6°C/15.6°C) (water = 1)
DENSITY:	6.5 to 6.8 LB/US gal (780 to 820 g/l)
VAPOR DENSITY:	5 (air = 1) (approximately)
VAPOR PRESSURE:	0.2 mm Hg at 68°F (20°C) (approximately) 0.6 mm Hg at 100°F (38°C) (approximately)
BOILING POINT:	350°F (177°C) (initial)
FREEZING/MELTING POINT:	-45°F (-43°C) (maximum)
pH:	Not applicable.
EVAPORATION RATE:	0.1 (butyl acetate = 1) (based on Stoddard Solvent)
SOLUBILITY IN WATER:	Insoluble.
FLASH POINT:	148°F (64°C) (approximately) Tag Closed Cup
FLAMMABLE LIMITS IN AIR:	**LOWER:** 0.7 VOL% (minimum) **UPPER:** 5 VOL% (maximum)
AUTOIGNITION TEMPERATURE:	410°F (210°C) (minimum)

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.
INCOMPATIBILITY:	Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: Based on best current information, there is no known human sensitization associated with these products.

MUTAGENICITY: Based on best current information, there is no known mutagenicity associated with these products.

CARCINOGENICITY: Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see **SECTION 15: CALIFORNIA.**

REPRODUCTIVE TOXICITY: Based on best current information, there is no known reproductive toxicity associated with these products.

Also see **SECTION 15: CALIFORNIA.**

TERATOGENICITY: Based on best current information, there is no known teratogenicity associated with these products.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with these products.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: A Static Acute Bioassay as per the California Department of Fish and Game WPCL, was done using fathead minnows, and up to 750 ppm of the products in water.

The material passed the bioassay with only 1 out of 10 minnows dying. To fail the bioassay, more than 40% of the fish would die in 750 ppm.

OCTANOL/WATER PARTITION COEFFICIENT: Not available.

VOLATILE ORGANIC COMPOUNDS: 100 WT%; 6.5 to 6.8 LB/US gal; 780 to 820 g/l
As per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE CODE(S): Not regulated.
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

SECTION 14: TRANSPORT INFORMATION

DOT: COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA), NA1993, PG III

TDG: Not regulated.

EMERGENCY RESPONSE GUIDE NUMBER: 128
Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: Based on the ingredient listed in **SECTION 2**, these products do not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: These products pose the following physical and health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SARA SECTION These products do not contain toxic chemicals subject to the

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313:	requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.
CERCLA:	Based on the ingredient listed in **SECTION 2,** these products do not contain any "hazardous substance" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.
TSCA:	All the components of these products are listed on the TSCA Inventory.
CALIFORNIA:	These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and p-dichlorobenzene CAS 106-46-7 (at or below 5 mg/L). WARNING: These chemicals are known to the State of California to cause cancer. These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and toluene CAS 108-88-3 (at or below 30 mg/L). WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

CANADIAN REGULATIONS

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS:	B3, D2B
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):	All the components of these products are listed on the Canadian Domestic Substances List (DSL).

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SECTION 16: OTHER INFORMATION

REVISION INFORMATION: Updated with Safety-Kleen Texas address, modified Medical Emergency phone number, modified Transportation Spill number and modified Technical Information phone number.

LABEL/OTHER INFORMATION: These products are United States Department of Agriculture (USDA) approved and Underwriter's Laboratories (UL) classified.

User assumes all risks incident to the use of these products. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the products as supplied to the user.

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Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Parts Washer / Cleaner

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Parts Washer Cleaner

Area of Generation: Maintenance Area

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid material generated from the cleaning of parts in the Maintenance Area.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)
- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)
- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)
- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA].– This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☑ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☑ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: Exhibits D006, D039

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Safety Kleen

11/23/1995

safety-kleen

Report Date: 11/21/95
Report: **Premium Solvent**

Control#: 9521743
Survey: PS007400

Generator:
Climax Molybdenum
2598 Hwy 61 S
Ft Madison, IA 52627

Safety-Kleen Service Representative / Branch Number:
7066 Joe Sanford / 504701

Dear Customer:
Please review the results of the analysis completed by Safety-Kleen Corp. on your sample. Your sample submitted has FAILED the Safety-Kleen Non-Hazardous Waste Screening analysis. Your waste may be characterized as Hazardous waste for the underlined constituents listed.

Your waste will have to be managed as Hazardous Waste unless you wish to verify the Hazard/ Non-Hazardous status by repeating the SK Premium Solvent Screening or by a "Mini-TCLP" analysi The "Mini-TCLP" analysis is a portion of the TCLP analysis that can be performed at a reduced rat from the cost of a complete TCLP analysis.

Please contact your local Safety-Kleen representative or branch facility listed above if you have any questions.

EPA Code	Parameter	Report Limits	Result	Units
D001	FLASH @ 142	N/A	NO	N/A
D006	Cadmium	1.000	<0.80	mg/L
D008	Lead	5.000	2.1	mg/L
D019	Carbon Tetrachloride	0.700	<0.40	ug/mL
D039	**Tetrachloroethylene (Perc)**	**0.700**	**>1.0**	**ug/mL**
D040	Trichloroethylene (TCE)	0.500	<0.40	ug/mL

John Schmitz
Corporate Lab Manager

Allan Manteuffel Technical Center

P.O. Box 92050
Elk Grove Village, IL 60009-2050
Fax: 312/825-7853

12555 W. Old Higgins Rd.
Elk Grove Village, IL 60007
Telephone: 312/825-7338

SAFETY-KLEEN PREMIUM SOLVENT
SAFETY-KLEEN PREMIUM GOLD SOLVENT

safety-kleen.

MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SAFETY-KLEEN PREMIUM SOLVENT
SAFETY-KLEEN PREMIUM GOLD SOLVENT

SYNONYMS: Parts Washer Solvent; Petroleum Distillates; Petroleum Naptha; Naptha, Solvent; Stoddard Solvent; Mineral Spirits.

PRODUCT PART NUMBERS: 6605, 6638.

PRODUCT USE: Cleaning and degreasing metal parts.
If these products are used in combination with other products, refer to the Material Safety Data Sheets for those products.

These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.	24-HOUR EMERGENCY PHONE NUMBERS MEDICAL:	TRANSPORTATION (SPILL):
	1-800-752-7869	1-800-468-1760

SUPPLIER:
Safety-Kleen Corp.
5400 Legacy Drive
Cluster II, Building 3
Plano, Texas 75024
USA
1-800-669-5740

TECHNICAL INFORMATION: 1-800-669-5740, Press 1 then Extension 7500

MSDS FORM NUMBER: 82658 (Also formerly known as 82529)

ISSUE: December 12, 2002

ORIGINAL ISSUE: January 26, 1995 (Also formerly January 7, 1993)

SUPERSEDES: March 24, 2000

PREPARED BY: Product MSDS Coordinator

APPROVED BY: MSDS Task Force

SAFETY-KLEEN PREMIUM SOLVENT
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MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

				OSHA PEL		ACGIH TLV®			
WT%	NAME	SYNONYM	CAS NO.	TWA	STEL	TWA	STEL	LD[a]	LC[b]
100	Distillates (petroleum), hydrotreated light[e]	N.Av.	64742-47-8	500[d] ppm	N.Av.	100[d] ppm	N.Av.	>5000[c]	>5500[d] mg/m^3/4 hours

N.Av. = Not Available
[a]Oral-Rat LD (mg/kg)
[b]Inhalation-Rat LC
[c]Based on Stoddard solvent: Skin-Rabbit LD_{50} >3000 mg/kg
[d]Based on Stoddard Solvent.
[e]Based on Stoddard Solvent, NIOSH IDLH (Immediately Dangerous to Life or Health): 20000 mg/m^3 (5000 ppm)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE
Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.

WARNING!

PHYSICAL HAZARD
Combustible liquid and vapor.

HEALTH HAZARDS
May be harmful if inhaled.
May irritate eyes and skin.
May be harmful if swallowed.
Contains material which may cause central nervous system damage.

ENVIRONMENTAL HAZARDS
Not toxic to aquatic life.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: May cause irritation with watering, stinging, and/or redness.

SKIN: May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

INGESTION (SWALLOWING): May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

CHRONIC: Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated inhalation and/or ingestion has been suggested to produce kidney toxicity in dogs but in no other species, including humans. According to one unsubstantiated human case report, prolonged or repeated inhalation, skin contact, and/or ingestion may cause mild, acute chemical hepatitis and acute, yellow atrophy (size reduction) of the liver. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis); and/or burns.

CANCER INFORMATION: No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA.**

POTENTIAL ENVIRONMENTAL EFFECTS
Product is not toxic to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION.**

SECTION 4: FIRST AID MEASURES

INHALATION: (BREATHING) Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

EYES: If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

SKIN: Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.

INGESTION: (SWALLOWING) Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

NOTE TO PHYSICIANS: Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869 for additional information.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: 148°F (64°C) (approximately) Tag Closed Cup

FLAMMABLE LIMITS IN AIR: **LOWER:** 0.7 VOL% (minimum)
UPPER: 5 VOL% (maximum)

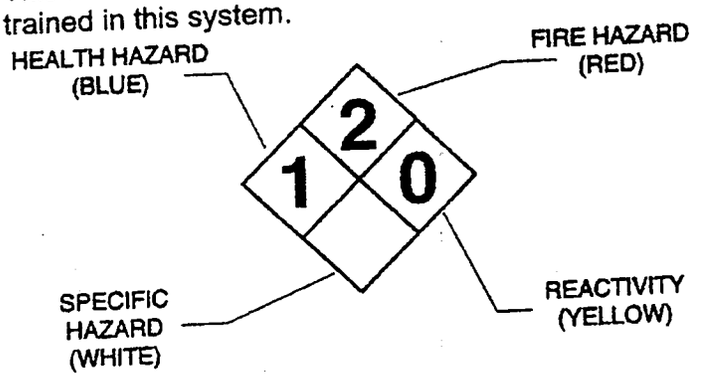
AUTOIGNITION TEMPERATURE: 410°F (210°C) (minimum)

HAZARDOUS COMBUSTION PRODUCTS: Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

CONDITIONS OF FLAMMABILITY: Heat, sparks, or flame.

EXTINGUISHING MEDIA: Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

NFPA 704 HAZARD IDENTIFICATION: This information is intended solely for the use by individuals trained in this system.



FIRE FIGHTING INSTRUCTIONS:	Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.
FIRE AND EXPLOSION HAZARDS:	Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using these products.
SHIPPING AND STORING:	Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

SAFETY-KLEEN PREMIUM SOLVENT
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MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

EYE PROTECTION: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

OTHER PROTECTIVE EQUIPMENT: Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, AND ODOR:	Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.
ODOR THRESHOLD:	30 ppm (based on Stoddard Solvent)
MOLECULAR WEIGHT:	Not available.
SPECIFIC GRAVITY:	0.78 to 0.82 at 60°F/60°F (15.6°C/15.6°C) (water = 1)
DENSITY:	6.5 to 6.8 LB/US gal (780 to 820 g/l)
VAPOR DENSITY:	5 (air = 1) (approximately)
VAPOR PRESSURE:	0.2 mm Hg at 68°F (20°C) (approximately) 0.6 mm Hg at 100°F (38°C) (approximately)
BOILING POINT:	350°F (177°C) (initial)
FREEZING/MELTING POINT:	-45°F (-43°C) (maximum)
pH:	Not applicable.
EVAPORATION RATE:	0.1 (butyl acetate = 1) (based on Stoddard Solvent)
SOLUBILITY IN WATER:	Insoluble.
FLASH POINT:	148°F (64°C) (approximately) Tag Closed Cup
FLAMMABLE LIMITS IN AIR:	**LOWER:** 0.7 VOL% (minimum) **UPPER:** 5 VOL% (maximum)
AUTOIGNITION TEMPERATURE:	410°F (210°C) (minimum)

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.
INCOMPATIBILITY:	Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: Based on best current information, there is no known human sensitization associated with these products.

MUTAGENICITY: Based on best current information, there is no known mutagenicity associated with these products.

CARCINOGENICITY: Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see **SECTION 15: CALIFORNIA.**

REPRODUCTIVE TOXICITY: Based on best current information, there is no known reproductive toxicity associated with these products.

Also see **SECTION 15: CALIFORNIA.**

TERATOGENICITY: Based on best current information, there is no known teratogenicity associated with these products.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with these products.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: A Static Acute Bioassay as per the California Department of Fish and Game WPCL, was done using fathead minnows, and up to 750 ppm of the products in water.

The material passed the bioassay with only 1 out of 10 minnows dying. To fail the bioassay, more than 40% of the fish would die in 750 ppm.

OCTANOL/WATER PARTITION COEFFICIENT: Not available.

VOLATILE ORGANIC COMPOUNDS: 100 WT%; 6.5 to 6.8 LB/US gal; 780 to 820 g/l
As per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE CODE(S): Not regulated.
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

SECTION 14: TRANSPORT INFORMATION

DOT: COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA), NA1993, PG III

TDG: Not regulated.

EMERGENCY RESPONSE GUIDE NUMBER: 128
Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: Based on the ingredient listed in **SECTION 2**, these products do not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: These products pose the following physical and health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SARA SECTION These products do not contain toxic chemicals subject to the

SAFETY-KLEEN PREMIUM SOLVENT
SAFETY-KLEEN PREMIUM GOLD SOLVENT
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

313:	requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.
CERCLA:	Based on the ingredient listed in **SECTION 2,** these products do not contain any "hazardous substance" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.
TSCA:	All the components of these products are listed on the TSCA Inventory.
CALIFORNIA:	These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and p-dichlorobenzene CAS 106-46-7 (at or below 5 mg/L). WARNING: These chemicals are known to the State of California to cause cancer. These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and toluene CAS 108-88-3 (at or below 30 mg/L). WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

CANADIAN REGULATIONS

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS:	B3, D2B
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):	All the components of these products are listed on the Canadian Domestic Substances List (DSL).

SAFETY-KLEEN PREMIUM SOLVENT
SAFETY-KLEEN PREMIUM GOLD SOLVENT
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 16: OTHER INFORMATION

REVISION INFORMATION: Updated with Safety-Kleen Texas address, modified Medical Emergency phone number, modified Transportation Spill number and modified Technical Information phone number.

LABEL/OTHER INFORMATION: These products are United States Department of Agriculture (USDA) approved and Underwriter's Laboratories (UL) classified.

User assumes all risks incident to the use of these products. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the products as supplied to the user.

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Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Used Antifreeze

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Used Antifreeze

Area of Generation: Maintenance Garage

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid antifreeze from vehicles such as trucks and fork lifts. Accumulated separately from other vehicle fluids.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
  None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The ~~material~~ is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Not an EPA regulated

Reasoning: material. See attached profile

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: EDG facility

5/24/2001

EOG Environmental, Inc.
5611 WEST HEMLOCK STREET
MILWAUKEE, WI 53223
(800) 234-1156 (414) 353-1822

WS Number: _____
Approval #: _____
WID988850056

A. Generator Name: Climax Molybdenum Customer #: _____ Bill to: HEI Consultants, Inc.
Address: 2598 Highway 61 Billing Address: P.O. Box 1472
City, State, Zip: Ft Madison, Iowa 52627 SIC Code: _____ City, State, Zip: Keokuk, IA 52632
Contact: Shelly Heston Title: _____ Contact: Susan Garrett Title: Trans. Coordinator
Telephone: 319-463-2224 Ext. _____ Fax #: _____ Phone Number: (319) 524-8273 Fax #: (319) 524-9019
EPA ID #: IAD000222653 This profile sheet was completed using: ☒ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS
Name of Waste: Used Antifreeze
Process Generating Waste: Used Antifreeze
Color _____ Odor: _____ ☐ None ☒ Mild ☐ Strong ☒ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases _____ ☒ Liquid 100 % ☐ Powder _____ % ☐ Solid _____ % ☐ Sludge _____ %

C. RCRA AND DOT INORMATION
Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes: _____
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 55-220 /Units: Gal
Proper Shipping Name: Non-Regulated Material
Hazardous Class #: _____ PG #: _____ UN/NA #: _____ Additional Description: _____
CERCLA Reportable Quantity (RQ): _____ Volume on Hand: 1 X 55 G
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: DM Size: 55 G

D. SPECIAL HANDLING INSTRUCTIONS If special handling techniques are required, specify: Proper PPE
Is a representative sample provided? ☐ Yes ☒ No
Treatment: _____ ☐ TCLP ☒ Generator Knowledge ☐ Total

E. METALS (Indicate in parts per million (PPM) if this waste contains any of the following using):

Metal	Less than	or Actual
Arsenic	☒ <5 ☐ <500	
Barium	☒ <100	
Cadmium	☒ <1 ☐ <100	
Chromium	☒ <5	
Lead	☒ <5 ☐ <500	
Mercury	☒ <0.2 ☐ <20	
Selenium	☒ <1 ☐ <100	
Silver	☒ <5	
Chromium-Hex	☒ <5 ☐ <500	
Copper	☒ <5	
Nickel	☒ <5 ☐ <134	
Thallium	☒ <5 ☐ <130	
Zinc	☒ <5	

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐ <0.8	☒ <0.8-1.0	☐ <1.0-1.2	☐ <1.2-1.4	☐ <1.4-1.7	☐ >1.7 Actual:
Total Suspended Solids:		☒ 0.5	☐ 0.5-2.0	☐ 2.0-5.0	☐ 5.0-20	☐ >20 Actual:
pH:	☐ <2	☐ 2-6	☒ 6-8	☐ 8-10	☐ 10-12.5	☐ >12.5 Actual:
BTU's:	☒ <1	☐ 1-4	☐ 4-8	☐ 8-12	☐ 12-16	Actual:
Flash Point (Closed cup):		☐ <73°F	☐ 73-140°F	☐ >140-200°F	☒ >200°F	Actual:
Sulfur (%WT):		☒ <0.5	☐ 0.5-2.0	☐ 2-5	☐ >5.0	Actual:

G. HAZARDOUS CHARACHTERISTICS AND OTHER COMPONENTS
Reactivity: ☒ None ☐ Explosive ☐ Pyrophoric ☐ Shock Sensitive ☐ Water Reactive ☐ Biological ☐ Radioactive ☐ Acutely Hazardous Waste
Viscosity: ☒ Low ☐ Medium ☐ High Are TC Codes Present? ☐ Yes ☒ No (If yes, please list in USEPA Waste Code Section).
Halogens: ☐ 0 % Chlorine ☐ 0 %Fluorine ☐ 0 % Bromine ☐ 0 % Iodine
Cyanides: (ppm) 0 PCD's: (ppm) 0 Pesticides: (ppm) 0 Sulfides: (ppm) 0 Phenolics: (ppm) 0

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Anti-freeze	95-99 %		%		%		%
Oil	1-5 %		%		%		%
	%		%		%		%
	%		%		%		%
	%		%		%		%
	%		%		%		%

I hereby certify that all information submitted in this and all attachments is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to agree EOG Environmental, Inc. as Generator's agent for disposal of waste accordingly Generator specifically authorizes officers and/or employees of EOG Environmental, Inc., to sign forms and/or contracts in respect to waste disposal utilizing only information and matters that appear on the EOG Environmental "Profile Sheet" above. In this respect, EOG Environmental, Inc., is in no manner charge or alter the data on the above stated sheet. The Generator specifically acknowledges that it has carefully reviewed the above and/or sheet data and information with the above limitations. Generator further consents and directs that the officer and/or employee of EOG Environmental, Inc., sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

X Shelly Heston
SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT

X Env. MANAGER
TITLE

X 5/24/2001
DATE

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Roaster Brick (Refractory)

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Roaster Brick (Refractory)

Area of Generation: Roaster (Turnaround / Repair)

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid material generated from cleaning out the Roaster. The bricks are reset during turnaround New ones are put in and the old ones have taken out.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION
FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**
This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
  None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1
Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to ~~Table 2.~~ Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.).

Reasoning: TCLP done and All results Are below Threshold levels

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: May be used AS ~~[illegible]~~ riprap per STATE of IOWA letter dated September 9, 1991

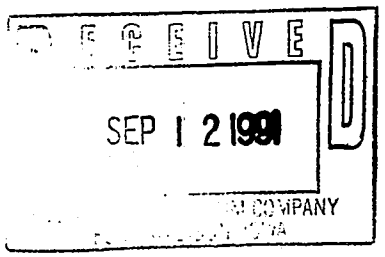
4-16-99

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

September 9, 1991



Thomas Anderson
Climax Molybdenum
Box 220
Fort madison, Iowa 52627

Dear Mr Anderson:

I am writing in response to your inquiry concerning the waste designation of roaster bricks from your roasters. Brick is defined as rubble in the Code of Iowa and the Iowa Administrative Code. Rubble is not a solid waste and therefore does not have to be disposed in a sanitary landfill.

The bricks could be used for riprap but I would suggest you contact your county Corps of Engineers or other county officials that have jurisdiction over the eroding land. They may have criteria which you must follow for erosion control.

Sincerely,

Gayle Farrell

Gayle Farrell
Environmental Specialist
Solid Waste Section

cc: Field Office 6

CLIMAX MOLYBDENUM COMPANY
A unit of AMAX Inc.

P.O. BOX 220 • FORT MADISON, IOWA 52627 • (319) 463-7151 Telephone
(319) 463-7315 Rapifax

August 23, 1991

Iowa Dept. of Natural Resources
Environmental Division
Solid Waste Dept.
Wallace Building
Des Moines, IA 50319
Attn: Gayle Farrell
Re: Roaster Bricks

Dear Ms. Farrell,

This letter is a follow-up to our phone conversation on August 22, 1991 regarding our used roaster brick. In July of this year, several roaster bricks were replaced in our two roasters. The removed bricks were hosed off to remove any dust or loose material. The washings were recycled into the plant. A picture of the used bricks is included. The quantity of bricks is estimated at 20 tons. Now the question is what is acceptable for reuse or disposal of the used bricks.

Two separate composite samples were taken from the bricks. Each sample consisted of chipping fragments from the inside face of several randomly selected bricks. The chip composites were ground and subjected to a TCLP test in our lab. The results are shown in the attached table. The bricks are classifiable non-hazardous.

Can the bricks be classified as construction debris and used as riprap? If not, we would like to obtain permission to dispose of them in our company landfill.

If you have any questions, please contact me.

Sincerely,

Thomas E. Anderson, P.E.
Environmental Engineer

TEA/cb
Att.
cc: T. C. Kearns

Hazardous Waste Test

TCLP Analysis (mg/l)

Roaster Brick

Parmeters	Sample 1	Sample 2	Hazardous Limits
Arsenic	0.05	0.05	5
Barium	0.02	<1	100
Cadmium	0.18	0.47	1
Chromium	0.02	0.17	5
Lead	0.06	0.12	5
Mercury	<0.05	<0.02	0.2
Selenium	0.1	0.02	1
Silver	<1	<1	5
pH	3.39	3.79	<2, >11.5
Other Parameters of Interest			
Mo	726	231	None
Classificatio	Nonhaz	Nonhaz	

Extractions were made on 100 gm samples composited from several brick inside faces.

CLIMAX MOLYBDENUM COMPANY
A unit of AMAX Inc.
P.O. BOX 220 • FORT MADISON, IOWA 52627

TCLP Analysis Worksheet

(3)

I. Sample Information

Sample Name	ROASTER BRICK
Sample No.	RB980618
Date Sampled	6-18-98
Sample Method	GRAB SAMPLE
Sample Location	SCRAP YARD
Sampler	J. Bartholomew

Comments:

TCLP Analysis Worksheet

Date: 6-19-98

Technician: J. Bartholomew

II. Preliminary Solids Determination

% Solids	
Filtrate Container Tare wt.	
Sample Container Tare wt.	
Filter Paper Tare wt	
Filtrate container + Filtrate wt	
Filtrate wt.	
Sample Container + Sample wt	
Sample wt	
Sample Container + Adhered wt	
Adhered wt.	
True Sample wt (Sample wt – Adhered wt)	
Solid Phase wt. (True wt. – Filtrate wt)	
% Solid Phase (Solid Phase wt/True wt)x100	

% Dry solids	
Solid Phase container tare wt	
Wet Solid Phase + filter +container wt	
Wet Solid Phase wt	
Dry solid phase + filter + container wt	
Dry solids wt.	
% Solids in Solid Phase (Dry solids/Wet Solids)x100	
True Sample % Solids (% Solids x Solid Phase wt/True wt)	
Pass 9.2 mm Sieve Test	Yes NO
> 0.5 Percent Solids	Yes NO

% Solids

WET SAMPLE + PAN 15.3137

(1) PAN .9994

14.3143

DRY SAMPLE + PAN 15.2906

(1) PAN .9994

14.2912

TCLP Analysis Worksheet

Date: 6-19-98

Technician: J. Bartholomew

#3

III. Extraction Fluid Determination

Initial pH check (pH < 5 use Ext. #1; pH > 5 add acid)	3.83
Acidifiec pH check (pH < 5 use Ext. #1; pH > 5 use Ext. #2)	
Extraction Fluid Used	(1) 2
Extraction Fluid pH check	4.96
Initial Ext. Fluid + sample pH	4.93

Filtrate Container Tare wt.	
Sample Container Tare wt.	
Filter Paper Tare wt	
Filtrate container + Filtrate wt	
Filtrate wt.	
Filtrate Volume	
Sample Container + Sample wt	
Sample wt	
Sample Container + Adhered wt	
Adhered wt.	
True Sample wt	100.07
Weight of Extraction Fluid used (20 X %Solids X True Wt. / 100)	
Vol of Extraction Fluid used	2001
Extraction Fluid pH	4.96

Initial Extraction Start Time	3-16-99	6:00 pm
Final Extraction Time	3-17-99	10:00 AM
Liquid Phase Extraction vol		1992
pH After Extraction		4.83

RB980618

TCLP Analysis ROASTER BRICK

Date: 4-16-99

Technician: J. Bart Holoman

IV. Final Test Results

Parameter (mg/l)	Test Results	Hazardous Limits
Arsenic	0.02	5.0
Barium	<10	100.0
Cadmium	.160	1.0
Chromium	<.5	5.0
Lead	<.5	5.0
Mercury	<0.02	0.2
Selenium	<0.01	1.0
Silver	<0.50	5.0

Classification

Hazardous

Nonhazardous

High-Alumina Refractories

HIGH-ALUMINA BRICK	ALCOR® 32** Unburned Phosphate-Bonded High-Alumina Brick	CORAL® BP Burned Phosphate-Bonded High-Alumina Brick	CORAL® P-32* Unburned Phosphate-Bonded High-Alumina Brick	CORAL P-75® Unburned Phosphate-Bonded High-Alumina Brick	ALUSA® + High-Alumina Brick
Bulk Density lb/ft³ *(kg/m³)*	175 *(2,803)*	177 *(2,835)*	178 *(2,851)*	163 *(2,611)*	160 *(2,563)*
Apparent Porosity, %	17.6	16.8	17.1	15.4	17.5
Crushing Strength lb/in² *(N/mm²)* at 70°F (21°C)	10,510 *(72)*	20,750 *(143)*	11,740 *(81)*	8,870 *(61)*	7,100 *(49)*
Modulus of Rupture lb/in² *(N/mm²)* at 70°F (21°C)	2,100 *(14)*	3,300 *(23)*	2,540 *(18)*	2,320 *(16)*	1,610 *(11)*
Loss of Strength, % 5 Cycles at 2200°F (1205°C)					*48.0*
Permanent Linear Change, % After Heating at 2910°F (1600°C)	+0.8	-0.6	+1.0	+0.5	+2.0
Load Test, 25 psi (2 kg/cm²) % Linear Subsidence After Heating at 2640°F (1450°C)		0.7	1.0	0.5	1.3
Chemical Analysis: Approximate % (Calcined Basis)					
Silica (SiO_2)	8.1	8.5	8.3	24.0	25.8
Alumina (Al_2O_3)	80.6	82.6	82.3	69.1	69.3
Titania (TiO_2)	2.6	2.3	2.6	2.5	3.0
Iron Oxide (Fe_2O_3)	1.4	1.1	1.2	1.0	1.5
Lime (CaO)	0.2	0.1	0.2	0.1	0.1
Magnesia (MgO)	0.1	0.1	0.1	0.1	0.1
Alkalies (Na_2O+K_2O)	0.2	0.1	0.2	0.2	0.2
Phosphorous Pentoxide (P_2O_5)	6.0	5.2	5.1	3.0	
Other Oxides	0.8				

NOTE: The above data are typical of the properties for the most commonly produced commercial sizes.The data are subject to reasonable variations and should not be used for specification purposes.

ASTM Test Methods, where applicable, are used for determination of data.

* Data are typical of the properties of commercial 9" straight brick.

** Patent Pending.

Hygienic Laboratory

The University of Iowa

Date of report: 04-07-1999

JOE BARTHOLOMEW
CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
PO BOX 220
FORT MADISON IA 52627

Sample Number	**9952795**
Date Received	03-18-1999
Project	
Date Collected	03-17-1999 13:00
Collection Site	climax molybdenum co.
Collection Town	Fort Madison
Description	tclp extracted sample
Reference	RB980618
Collector	BARTHOLOMEW JOE
Phone	(319) 463-2222
Purchase Order	B7423

Results of Analyses

Toxicity Characteristic Leaching Procedure (TCLP)

Analyte	Leachate mg/L	Regulatory Level mg/L	Method	Analyst/ Verifier	Date Analyzed
Mercury	<0.02	0.20	EPA 1311/7470	PB/PJM/DC	03-26-1999
Silver	<0.50	5.0	EPA 1311/7761	ML/DS	03-22-1999

Description of units used within this report

mg/L - Milligrams per Liter

Iowa Laboratory Certification No. 027. AIHA, ICR, NVLAP, USEPA and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.

Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

http://www.uhl.uiowa.edu

H.A. Wallace Building
East Grand, Des Moines, Iowa 50319-0034
515/281-5371 Fax: 515/243-1349

OWNERSHIP OF DOCUMENT

This document, and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Howard R. Green Company and is not to be used, in whole or in part, for any other project without the written authorization of Howard R. Green Company.

SOLID WASTE COMPREHENSIVE PLAN PART I
SUBSEQUENT PLAN, 2002

INDUSTRIAL LANDFILL

CLIMAX MOLYBDENUM COMPANY

LEE COUNTY, IOWA

MARCH 2002

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I. INTRODUCTION

The purpose of this "Subsequent Plan" is to update the "Solid Waste Comprehensive Plan Part I, Subsequent Plan," dated November 1998, for Climax Molybdenum Company's Industrial Landfill located in Lee County, Iowa. The Iowa Department of Natural Resources (IDNR) approved the 1998 Subsequent Plan on January 16, 1999. See appendix A for the approval correspondence. This plan is required by Iowa Code Section 455B.304; Iowa Code Supplement Chapter 455D, Subrule 101.5(7); and by a provision of Landfill Permit # 56-SDP-6-80P.

This report will include updates on all baseline information previously submitted and incorporate the changes in operations and procedures where applicable. Alternatives according to the State of Iowa's waste management hierarchy will be examined and any progress toward meeting the state volume reduction and recycling goals, per Subrule 101.5(2), will be evaluated.

II. PLANNING AREA DESCRIPTION

A. Location

The Climax Molybdenum Company in Fort Madison, Lee County, Iowa is the owner and operator of the Climax Molybdenum Company Landfill. The 244-acre site is located approximately 2 miles north of Argyle and occupies the NW ¼ and W ½ of NE ¼ and S 150 feet of the E ½ of the NE ¼ of Section 32 in Township 67 North, Charleston Township, Range 6 West in Lee County, Iowa. The landfill is operated under Permit Number 56-SDP-6-80P for disposal of synthetic gypsum sludge.

Fort Madison and Argyle are both located in Lee County, which is part of the "Great River Regional Waste Authority's" solid waste disposal planning area. The Waste Authority has coordinated the Regional Solid Waste Management Comprehensive Plan, Part I for municipal waste disposal. However, for the purpose of developing a Comprehensive Plan, Part I for the Climax Molybdenum Company Landfill, the Iowa Department of Natural Resources (IDNR) has allowed the landfill to be considered a separate entity within the larger region of the " Great River Regional Waste Authority".

B. Geology and Soils at the Landfill Site

The landfill is located on the Southern Iowa Drift Plain, which is characterized by loess caps on hills made of glacial till. The loess is typically 5 to 14 feet thick at the site. A minimum of 80 feet of till occurs beneath the landfill. The topography consists of gently rolling hills. The site is mainly located in a ravine which trends northwest to southeast.

The soil types around the landfill site can be grouped into three main categories, as described in the "Hydrogeologic Investigation Report and Hydrologic Monitoring System Plan for the Climax Molybdenum Company Landfill", dated February 1992. Silt loams derived from loess occur in the uplands. The side slope soils, which enclose the landfill site, are all till-derived. The valley bottom soils are derived from the upland and side slope top soils and are silty. The permanence of numerous ponds in the area, floored in this till, is an indication of the soil's low permeability.

III. UPDATE OF PLANNING AREA DESCRIPTION

A. Agency Responsible for Sponsoring and Preparing the Plan

Howard R. Green Company has prepared this Subsequent Plan on behalf of Climax Molybdenum Company. The contact person at Howard R. Green Company is:

Brian K. Harthun, P.E.
8710 Earhart Lane SW
P.O. Box 9009
Cedar Rapids, IA 52409-9009
Tel: 319/841-4375
Fax: 319/841-4012

B. Local Governments Participating in the Plan

This comprehensive plan is solely for Climax Molybdenum Company. No other local governments will be participating in the plan.

C. Permitted Sanitary Disposal Projects and Other Waste Management Facilities in the Planning Area

The only permitted sanitary landfill in the "Great River Regional Waste Authority" is the Lee County Sanitary Landfill. The current tipping fee at this landfill is $38 per ton and the estimated remaining capacity is six years.

D. Changes to the Planning Area Description

There have been no changes made to the planning area description since the previous plan was approved or amended.

IV. BASELINE AND CURRENT-YEAR DATA

A. Population

Population figures are not applicable to Climax Molybdenum Company's Landfill.

B. Amount of Waste Landfilled and Its Composition

The Molybdenum Plant produces several molybdenum-containing compounds from concentrated molybdenite ore (MoS_2). The molybdenum ore comes primarily from mines in Colorado, as well as other U. S. locations.

The Molybdenum Plant roasts concentrated molybdenite ore to produce molybdenum oxide. The roaster off-gasses contain 2% - 3% sulfur dioxide (SO_2). A sulfuric acid plant is used as an air pollution control device to remove the SO_2 from the off-gasses. A gas cleaning system between the roaster and the acid plant generates an acid scrubber wastewater. Lime ($CaOH_2$) is used to neutralize this waste stream. A synthetic gypsum ($CaSO_{4\cdot2}O$) sludge is generated at a rate of up to 20 tons per day (wet basis).

The gypsum sludge from the acid scrubber is pumped into lined ponds at the plant site where it is held on an interim basis before being dewatered and transported to the disposal site. Landfilling operations are conducted every two to three years. See Table 2, Solid Waste Abatement Table.

In 2001, Climax Molybdenum Company generated 2,213 tons of gypsum sludge. In that same year, 1,928 tons of sludge was deposited in their landfill. This latter figure is not an accurate representation of annual sludge disposal at their landfill. As indicated in the Solid Waste Abatement Table (Table 2), the average annual sludge disposal rate, for the past three years, is approximately 3100 tons.

V. EVIDENCE OF COOPERATION

This comprehensive plan is solely for Climax Molybdenum Company's Industrial Landfill. The IDNR has allowed the landfill to be considered a separate entity within the larger region of the "Greater River Regional Waste Authority".

VI. UPDATES ON PUBLIC PARTICIPATION OPPORTUNITIES

This comprehensive plan is solely for Climax Molybdenum Company's Industrial Landfill. The public does not participate during the development and implementation of the plan; therefore, this section does not apply.

VII. SUMMARY OF PUBLIC EDUCATION ACTIVITIES

This comprehensive plan is solely for Climax Molybdenum Company's Industrial Landfill. No public waste is accepted at the landfill; therefore, this section does not apply.

VIII. EVALUATION OF PLANNING AREA'S INTEGRATED WASTE MANAGEMENT SYSTEM AND PROGRESS TOWARD MEETING THE GOALS

A. Source Reduction

The volume of gypsum sludge generated is dependent upon the acid concentration of the molybdenum roaster off-gas scrubber wastewater. The wastewater acid concentration is relatively constant and is dependent upon the molybdenum roaster production rate. It is possible to concentrate the acid wastewater stream, but there is no benefit in this, as the acidity of the stream goes up proportionally; thus, requiring the same amount of lime for neutralization and consequently generating the same amount of gypsum sludge as before.

Since gypsum is a by-product of a manufacturing process, it would require new technologies to reduce the volume of gypsum slurry produced. However, the volume of gypsum sludge is reduced considerably by collecting and storing it in large settling ponds at the plant site, and dewatering it prior to hauling to the landfill. This dewatering reduces the quantity of sludge for disposal by increasing the solids content from 30% to 55%.

Unless a new technology is developed that generates less acid wastewater, the amount of lime for neutralization cannot be reduced; thus, the generation of gypsum sludge cannot be reduced unless manufacturing operations are decreased.

B. Recycling

In many of the states across the U.S. and especially in Iowa, there are large, readily accessible reserves of native gypsum. More than 95% of the gypsum mined world wide is utilized in making gypsum plaster and wallboard, used in the construction industry. However, the wallboard industry has established stringent criteria for gypsum that require consistency of quality and texture. This must be guaranteed by the producer. The Climax Molybdenum Company cannot give such a guaranty for this by-product of its acid neutralizing process.

As indicated in the 1995 Subsequent Plan, the synthetic gypsum, produced by Climax Molybdenum Company, cannot be utilized by the wallboard industry. This is because of the small crystal size of the synthetic product and due to high pH values and high total salts content of this product.

Gypsum is beneficial as a soil conditioner to increase the calcium, magnesium, and pH of soil. To qualify for land application without the necessity of a permit, the sludge must meet the requirements of "Land Application of Wastes" as listed in Chapter 567 IAC 121. Since the gypsum sludge contains trace amounts of heavy metals, including selenium, land application is not a feasible form of reuse or recycling.

The production of gypsum sludge could be avoided if it would be possible to find a practical and economical use for the acid scrubber wastewater without the need for neutralization. As explained in the 1995 Subsequent Plan, no alternative use for the waste acid liquid has been found. At this time, synthetic gypsum has no commercial value.

C. Combustion

The combustion of gypsum sludge for volume reduction is not a feasible option. The gypsum, even dewatered, cannot be burned.

IX. RE-EVALUATION OF ALTERNATIVES ACCORDING TO THE STATE'S WASTE MANAGEMENT HIERARCHY

The State of Iowa's preferred hierarchy for the management of solid waste is as follows. The alternatives are placed in this order of preference according to their environmental impact.

A) Volume reduction at the source.
B) Recycling and reuse.
C) Combustion with energy recovery.
D) Combustion for volume reduction.
E) Disposal in a landfill.

As discussed in Section VIII of this report, source reduction, recycling, or combustion are not viable options for attaining the state waste reduction and recycling goals. In addition, disposing the gypsum sludge in other landfills is not an option for the Climax Molybdenum Company. The Lee County Landfill is currently in operation and is within a 20-mile radius of the Climax Molybdenum Company Plant. This landfill accepts non-gypsum solid waste but will not accept the gypsum sludge or other sludge from industrial sources.

X. SIX-YEAR IMPLEMENTATION PLAN AND SCHEDULE

The Management at Climax has initiated an in-house recycling program for other solid wastes generated at the factory and in the offices. Metal, paper, cardboard, and wood are now recycled or reused on a regular basis.

This in-house recycling program is part of Climax Molybdenum Company's efforts to reduce the demand for raw materials, and to reduce the volume of refuse to be deposited at the Lee County Sanitary Landfill. As indicated in Table 1, Solid Waste Recycling, the program has effectively reduced the amount of their solid waste, disposed in the Lee County Sanitary Landfill, by an average of 35% annually since 1997.

As the Solid Waste Abatement Table (Table 2) indicates, the Climax Molybdenum Company has met the 25 percent waste reduction goal. However, the company's anticipated annual generation rate of 2,500 tons of sludge will not allow the company to meet the July 1, 2000, 50 percent waste reduction goal. As stated previously, sludge generation is directly related to the manufacturing process. As the rate of production increases, the generation rate of gypsum sludge also increases.

As demonstrated in Section VIII of this Subsequent Plan, none of the currently available waste management alternatives are applicable to the gypsum sludge produced by the Climax Molybdenum Company.

TABLE 1. SOLID WASTE ABATEMENT

CLIMAX MOLYBDENUM COMPANY							
YEAR	1995	1996	1997	1998	1999	2000	2001
SOLID WASTE GENERATED [TONS]	559.7	766.7	516.5	536.1	546.5	414.8	397.2
SOLID WASTE LANDFILLED [TONS]	323.4	440.0	312.2	319.5	396.4	235.5	303.9
SOLID WASTE REUSED/RECYCLED [TONS]	236.3	326.8	204.3	219.5	150.1	179.3	93.4
REDUCTION IN SOLID WASTE DISPOSAL [%]	42.2	42.6	39.5	41.0	27.5	43.2	23.5

TABLE 2. GYPSUM SLUDGE WASTE

CLIMAX MOLYBDENUM COMPANHY GYPSUM LANDFILL													
YEAR	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*	1999*	2000*
POPULATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SOLID WASTE LANDFILLED OR STOCKPILED [TONS]	9,354	0	1,203	8,268	0	0	19,461 #	0	2,095	5,528	0	1,760	0
WASTE TO ENERGY AMOUNT [TONS]	0	0	0	0	0	0	0	0	0	0	0	0	0
REFUSE DERIVED FUEL AMOUNT [TONS]	0	0	0	0	0	0	0	0	0	0	0	0	0
INCINERATION AMOUNT [TONS]	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL SOLID WASTE GENERATION [TONS]	3,600	3,600	3,600	3,600	3,600	4,000	4,500	3,000	2,500	2,371	2,394	1,881	2,268
1989 WASTE GENERATION AMOUNT [TONS]	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600
PERCENT CHANGE FROM 1988 [%]	0	0	0	0	0	+11.11	+25.00	-16.67	-30.55	-34.1	-33.5	-47.8	-37.0

Notes: # The additional tonnage landfilled is due to thorough cleanup of storage ponds
* Project years.

TABLE 2. GYPSUM SLUDGE WASTE (CONTINUED)

CLIMAX MOLYBDENUM COMPANY GYPSUM LANDFILL													
YEAR	2001*	2002*	2003*	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
POPULATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SOLID WASTE LANDFILLED OR STOCKPILED [TONS]	1,928	0	7,500										
WASTE TO ENERGY AMOUNT [TONS]	0	0	0										
REFUSE DERIVED FUEL AMOUNT [TONS]	0	0	0										
INCINERATION AMOUNT [TONS]	0	0	0										
TOTAL SOLID WASTE GENERATION [TONS]	2,213	2,500	2,500										
1989 WASTE GENERATION AMOUNT [TONS]	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600
PERCENT CHANGE FROM 1988 [%]	-38.5	-30.55	-30.55										

Notes: # The additional tonnage landfilled is due to thorough cleanup of storage ponds
* Project years.

APPENDIX A

WASTE MANGEMENT ASSISTANCE DIVISION (WMAD) APPROVAL LETTER FOR THE 1998 SUBSEQUENT SOLID WASTE COMPREHENSIVE PLAN PART 1

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

January 16, 1999

Mr. Brian K. Harthun
Project Engineer
Howard R. Green Company
4250 Glass Road NE
PO Box 9009
Cedar Rapids, IA 52409-9009

Dear Mr. Harthun:

Climax Molybdenum Industrial Landfill
Third Subsequent Solid Waste Comprehensive Plan:
Submitted November 5, 1998
Permit No. 56-SDP-6-80P

I am writing to inform you that the above-referenced plan has been approved and that we will share this information with the Environmental Protection Division.

The approval is based upon the landfill accepting only synthetic gypsum sludge generated by the Climax Molybdenum plant in Fort Madison, IA. If materials other than the gypsum sludge described in the plan are disposed of, or if you accept waste from outside the service area specified in the plan, an amendment to the plan is required. Please contact Program Planners Bill Blum (515) 281-8382, or Caroline Truth (515) 281-5105 if either of these situations occur.

The free and confidential services of the Waste Reduction Assistance Program (WRAP) are also available to you. If you would like more information on WRAP's pollution and waste prevention services, please contact Brian Tormey at 515-281-8927, or Denise Rayborn at 515-281-8499.

The Waste Management Assistance Division will continue to evaluate the landfill's progress toward meeting the state's waste reduction and recycling goals. An updated plan must be submitted in conjunction with the landfill's next permit renewal. If you have any questions or comments please do not hesitate to contact Bill Blum or Caroline Truth at the numbers listed above. Thank you.

Sincerely,

Caroline Truth.

Caroline Truth
Acting Bureau Chief
Waste Management Assistance Division

Cc: Thomas Anderson, PE, Climax Molybdenum
Lavoy Haage, Environmental Protection Division, IDNR
IDNR Field Office #6, Washington, IA

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 / 515-281-5145 / TDD 515-242-5967 / FAX 515-281-8895

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Pesticides

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Pesticides

Area of Generation: General Plant Area

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Household pesticides used in general plant area

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)
The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)
There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- _ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.).

Reasoning: Not a hazardous waste
exclusion 261.4(b)(1)
See attached profile

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Safety Kleen

6/26/99

ACCEPT FOR SHIPMENT

CONTROL #: 3918867-7
LAB #: 9918867-1
PROFILE REF #: 3008524

BRANCH/SUBMITTER: 504701
DAVENPORT

C. GENERAL MATERIAL & REGULATORY INFORMATION:
NAME OF MATERIAL: BULK PACKED PESTICIDES (SOLIDS)
PROCESS DESCRIPTION: HOUSEHOLD HAZ WASTES
ODOR: STRONG

YES	NO		
	X	REGULATED OR LICENSED RADIOACTIVE WASTE	
	X	REGULATED MEDICAL / INFECTIOUS WASTE	
	X	WASTE SUBJECT TO BENZENE NESHAP REGULATIONS	
	X	TSCA REGULATED PCB WASTE	
	X	REGULATED SUBPART CC WASTE (VOC'S >= 500 PPM)	
	X	REGULATED OZONE DEPLETING SUBSTANCE	
	X	CERCLA REGULATED (SUPERFUND) WASTE	
	X	HAZARDOUS DEBRIS	
	X	WASTE CONTAINS UHC'S/CONSTITUENTS OF CONCERN	
	X	UHC IN SECTION D	
	X	UHC IN ADDENDUM	
X		MEETS LDR STANDARDS	
	X	PARTIALLY MEETS (FOR LANDFILL ONLY)	
	X	SORBENT ADDED	
	X	BIODEGRADABLE?	
X		EXEMPT WASTE; IF YES, LIST REFERENCE 40 CFR	261.4(B)(1)
	X	STATE HAZARDOUS WASTE	261.4(B)(1)
	X	EPA HAZARDOUS WASTE	261.4(B)(1)

EPA WASTE CODES: NONE

D. MATERIAL COMPOSITION:
1. CHEMICAL/PHYSICAL CONSTITUENTS:

E. REACTIVE CHARACTERISTICS:

YES	NO		
	X	EXPLOSIVE	
	X	SHOCK SENSITIVE	
	X	PYROPHORIC	
	X	OXIDIZER	
	X	WATER REACTIVE	
	X	AIR REACTIVE	
	X	REACTIVE CYANIDE	.0
	X	REACTIVE SULFIDE	.0
	X	POLYMERIZABLE	

OTHER INCOMPATIBLES:
KEEP AWAY FROM FOOD

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70F:
PH NON-AQUEOUS

PROFILE COMMENTS:
PAPERWORK PREQUAL

*** ACCEPT FOR SHIPMENT

CONTINUED ON NEXT PAGE

PARTS WASHER SERVICE
FLUID RECOVERY SERVICES
COMPLETED: 05/18/99
REVISED: 06/18/99
RUN: 06/19/99

ACCEPT FOR SHIPMENT

CONTROL #: 3918867-7
LAB #: 9918867-1
PROFILE REF #: 3008524

BRANCH/SUBMITTER: 504701
DAVENPORT

CORPORATE REVIEW:
DISPOSITION: ACCEPT FOR SHIP
REVIEW DATE: 05/18/1999

PART NUMBER: 0874174 TFS NH SD LF 30G
REVIEWERS: MAP

$89.00

APPROVED FACILITIES:
SAFETY-KLEEN (PECATONICA), INC
6125 N PECATONICA ROAD
PECATONICA, IL 61063
FED EPA#: ILD980502744
STATE EPA#: 2018000002
TELEPHONE: 8152392377
STATE AUTH:
ADD DESC: 3008524-PDCMD (LF-PES-01)

APPROVED DOT - SHIPPING DESCRIPTION
0023192 DRUM OR BULK
PESTICIDES, SOLID, TOXIC, N.O.S.
(CHLORDANE,DDT) 6.1 UN2588 PG III
(ERG#151)

US EPA WASTE CODES: NONE
USA

REVIEW COMMENTS:

OK FOR INCINERATION. WASTE SHIPPED IN DRUMS FROM THE CUSTOMERS SITE NEED TO BE EQUIPPED WITH A BUNG ON THE TOP LID PRIOR TO SHIPMENT. DRUMS RECEIVED FROM THE CUSTOMER LACKING BUNGS WILL BE RETURNED TO THE CUSTOMER BY THE SK TSDF.

THIS WASTE MUST BE SHIPPED IN "X, Y OR Z" DOT RATED CONTAINERS.

DO NOT SHIP THIS WASTE DIRECTLY TO A TSDF. WASTE MUST BE SHIPPED TO THE SERV CENTER FIRST.

SCHEDULE WITH PECATONICA. WRITE APPROVAL ON DRUMS AND MANIFEST (3008524-PDCMD). PROFILE EXPIRES 4/20/2000

THIS SERVES AS NOTICE PER FEDERAL AND STATE REGULATIONS THAT EACH FACILITY NOTED ABOVE HAS THE APPROPRIATE PERMITS, CAPABILITIES, CAPACITY; AND IS WILLING TO ACCEPT THE MATERIAL AS DESCRIBED IN THE APPROVAL SECTION. IT IS THE RESPONSIBILITY OF THE GENERATOR TO NOTIFY SAFETY-KLEEN CORP. OF ANY CHANGES IN THE PROCESS GENERATING THIS WASTE STREAM.

*** ACCEPT FOR SHIPMENT

END OF DOCUMENT

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Computers

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Computers / Computer Parts

Area of Generation: Plant offices, Administration Area

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid component. Fully intact Computer monitors, keyboards, mouse, processing units. Obsolete products are replaced with new ones.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☒ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
  None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

(The material is a **non-hazardous waste.**)

Other (i.e. universal waste, special waste, etc.). Computers computer

Reasoning: parts are sent to A recycling place. Currently Iowa has not ceased the disposal of computers in permitted landfills.

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: A-Tec recycling

7-15-2000

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : PCB Contaminated Waste

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Miscellaneous PCB Cont.

Area of Generation: Plant lighting - capacitors, ballasts

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid components Miscellaneous lighting components that are PCB contaminated - capacitors, ballasts. As these get changed they are replaced with PCB free components.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section.**

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☑ It is **not** a listed waste under the "P" or "U" listed waste codes.
  None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

(The material is a **non-hazardous waste.**)

Other (i.e. universal waste, special waste, etc.)._____

Reasoning: PCB Wastes Are TSCA regulated, but not "hazardous waste". TSCA does require the use of a hazardous waste manifest for shipping.

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: A-Tec Recycling

12/15/99

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Universal Waste - Fluorescent Bulbs

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Universal Waste - Fluorescent Bulbs

Area of Generation: Plant lighting

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid fluorescent bulbs generated from the plant lighting system.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☒ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Universal Waste

Reasoning: Per Federal regulations. Handled as a universal waste

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: A-Tec Recycling

Revised 1/02/2000

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Sanitary Sewage Sludge

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Sanitary Sewage Sludge

Area of Generation: Showers, Sinks, Toilets

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Semi Solid sludge material from the sanitary wastewater treatment system. The discharge from the sanitary treatment system is part of the permitted NPDES.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)
- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)
- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)
- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~**proceed to Table 2**~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Sanitary Sewage Sludge

Reasoning: No process water or weak acid enters the Sanitary system. The effluent from this system is part of the permitted NPDES.

Exclusion 40 CFR 261.4(a)(1)

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Keokuk or Fort Madison waste water treatment facilities.

1/13/2000

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Sulfur (Waste)

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Sulfur (Waste)

Area of Generation: Sulfur unloading Area in Acid Plant

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid material yellow in color mixed with dirt and gravel. Sources of ignition such as direct heat or sparks may cause a fire.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)
- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)
- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)
- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, proceed to **Table 2**. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Universal Waste

Reasoning: Per federal regulations. Handled as a universal waste

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: A-Tec Recycling

revised 1/02/2006

Print Close

Use page up/down keys to navigate

Material Safety Data Sheet

Genium Publishing Corporation
One Genium Plaza
Schenectady, NY 12304-4690 USA
(518) 377-8854

No. 56

SULFUR
(Revision A)
Issued: October 1979
Revised: August 1988

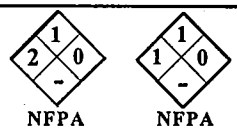
SECTION 1. MATERIAL IDENTIFICATION 26

Material Name: SULFUR

Description (Origin/Uses): Used in manufacturing sulfuric acid, carbon disulfide, sulfites, insecticides, plastics, enamels, metal-glass cements; in vulcanization and synthesis of rubber; in making gunpowder, and matches; for bleaching wood pulp, straw, wool, silk, felt, and linen.

Other Designations: Brimstone; S; CAS No. 7704-34-9

Manufacturer: Contact your supplier or distributor. Consult the latest edition of the *Chemicalweek Buyers' Guide* (Genium ref. 73) for a list of suppliers.



HMIS		NFPA Fire	NFPA Nonfire
H	1		
F	1		R 1
R	1		I 2
PPG*			S 2
*See sect. 8			K 1

SECTION 2. INGREDIENTS AND HAZARDS

	%	EXPOSURE LIMITS
Sulfur, CAS No. 7704-34-9	Ca 100	**Toxicity Data*** Human, Eye Irritation: 8 ppm

*See NIOSH, *RTECS* (No. WS4250000), for additional data.

Comments: Powdered sulfur may be considered a nuisance dust per the ACGIH. If this classification applies to your work environment, follow the TLV-TWA of 10 mg/m³ for total dust containing no asbestos and less than 1% crystalline silica.

SECTION 3. PHYSICAL DATA

Melting Point: >212°F (100°C)
Specific Gravity (H_2O = 1): Ca 2
Water Solubility (%): Insoluble
Molecular Weight: 32 Grams/Mole

Appearance and Odor: Yellow crystals, granules, powders, sticks, lumps, etc.; pure sulfur is odorless and tasteless. Sulfur exists in different forms (allotropes) that have slightly different physical properties.

SECTION 4. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temperature	Flammability Limits in Air	LOWER	UPPER
*	*	% by Volume	*	*

Extinguishing Media: *Sulfur is a combustible solid. Use a water fog or mist to fight sulfur fires; this will lessen the possibility of formation of a sulfur dust cloud. Applying a direct water spray is not recommended because it may scatter molten sulfur and dust. Steam and carbon dioxide may be useful in special cases.

Unusual Fire or Explosion Hazards: Sulfur dust particles suspended in air can explode, especially if they are in contact with oxidizing agents. Should a sulfur dust cloud form, immediately eliminate all possible sources of ignition (sparks, open flame, etc.) and take appropriate precautions such as spraying the affected area with a water mist or fog. When powdered sulfur is exposed to heat or sources of ignition, it is a weak fire and explosion hazard; its solid metallic form is even less reactive.

Special Fire-fighting Procedures: Wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in the pressure-demand or positive-pressure mode.

SECTION 5. REACTIVITY DATA

Sulfur is stable in closed containers at room temperature under normal storage and handling conditions. It does not undergo hazardous polymerization.

Chemical Incompatibilities: This material is a very reactive metal, especially in its powdered form. Hazardous reactions are reported between sulfur and aluminum, nitrates, chlorates, charcoal, bromates, iodates, and others. See Genium reference 84 (pp. 491M - 202 to 491M - 205) as well as the references cited in section 9 for a complete list of these hazardous reactions.

Conditions to Avoid: Avoid contact with incompatible chemicals and exposure to sources of ignition like heat, sparks, etc. Do not create dusty working conditions.

Hazardous Products of Decomposition: Toxic sulfur dioxide gas (SO_2) is produced during sulfur fires.

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SECTION 6. HEALTH HAZARD INFORMATION

Sulfur is not listed as a carcinogen by the NTP, IARC, NIOSH, ACGIH, or OSHA.

Summary of Risks: This material is very low in vapor pressure and toxicity. Sulfur dust can irritate the mucous membranes of the respiratory tract and the inner surface of the eyelids. For some individuals, skin sensitization may occur from repeated skin contact with sulfur.

Medical Conditions Aggravated by Long-Term Exposure: None reported. **Target Organs:** Eyes, skin.
Primary Entry: Inhalation; skin or eye contact. **Acute Effects:** Irritation of the skin, eyes, and mucous membranes.
Chronic Effects: Possible skin sensitization reactions.

FIRST AID

Eyes: Immediately flush eyes, including under the eyelids, gently but thoroughly with plenty of running water for at least 15 minutes.
Skin: Wash the affected area with soap and water.
Inhalation: Remove the exposed person to fresh air; restore and/or support his or her breathing as needed.
Ingestion: Never give anything by mouth to someone who is unconscious or convulsing. If the exposed person is responsive, induce vomiting. This is most effective within 30 minutes of ingestion.
GET MEDICAL HELP (IN PLANT, PARAMEDIC, COMMUNITY) FOR ALL EXPOSURES. Seek prompt medical assistance for further treatment, observation, and support after first aid. Remove any worker who has allergic reactions to sulfur from further exposure; consult with a physician before that worker is permitted to return to work in areas where exposure to sulfur is likely.

SECTION 7. SPILL, LEAK, AND DISPOSAL PROCEDURES

Spill/Leak: Notify safety personnel, evacuate all nonessential personnel, and provide adequate ventilation. Cleanup personnel need protection against contact with and inhalation of dust (see sect. 8). Scoop up spilled sulfur into suitable containers for disposal. Carefully sweep or vacuum up small spills or residues without creating dust clouds.

Waste Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow Federal, state, and local regulations.

OSHA Designations
Air Contaminant (29 CFR 1910.1000 Subpart Z): Not Listed
EPA Designations (40 CFR 302.4): Not Listed

SECTION 8. SPECIAL PROTECTION INFORMATION

Goggles: Always wear protective eyeglasses or chemical safety goggles. Follow OSHA eye- and face-protection regulations (29 CFR 1910.133). **Respirator:** Consult the *NIOSH Pocket Guide to Chemical Hazards* for general recommendations on respirators. Follow OSHA respirator regulations (29 CFR 1910.134). For emergency or nonroutine use (leaks or cleaning reactor vessels and storage tanks), wear an SCBA with a full facepiece operated in the pressure-demand or positive-pressure mode. **Warning:** Air-purifying respirators will *not* protect workers in oxygen-deficient atmospheres.
Other: Wear impervious gloves, boots, and aprons, etc., as required by the work environment to prevent prolonged or repeated skin contact. **Ventilation:** Install and operate general and local ventilation systems powerful enough to maintain airborne levels of sulfur below the exposure limit cited in section 2.
Safety Stations: Make eyewash stations, washing facilities, and safety showers available in areas of use and handling.
Contaminated Equipment: Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. Particles can adhere to contact lenses and cause corneal damage. Do *not* wear contact lenses in any work area.
Comments: Practice good personal hygiene; always wash thoroughly after using this material. Avoid transferring it from your hands to your mouth while eating, drinking, or smoking. Do *not* eat, drink, or smoke in any work area. Do not inhale sulfur dust.

SECTION 9. SPECIAL PRECAUTIONS AND COMMENTS

Storage/Segregation: Store sulfur in a cool, dry, well-ventilated area in closed containers away from sources of ignition and incompatible chemicals (see sect. 5).

Special Handling/Storage: Build all storage facilities with an explosion-relief design to minimize damages from possible dust cloud explosions. Ground and bond all containers used in the shipping and transferring operations of bulk powdered sulfur.

Engineering Controls: To decrease sources of ignition of dust cloud explosions, make all engineering systems of maximum explosion-proof design.

Transportation Data (49 CFR 172.101-2)
DOT Shipping Name: Sulfur (Solid) or Sulfur (Molten)
DOT ID Nos. UN1350 (Solid); UN2448 (Molten)
DOT Label: None
DOT Hazard Class: ORM-C
IMO Label: Flammable Solid (Solid and Molten)
IMO Class: 4.1 (Solid and Molten)

References: 1, 2, 84, 73, 90-93.

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Prepared by PJ Igoe, BS
Industrial Hygiene Review: DJ Wilson, CIH
Medical Review: MJ Hardies, MD

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STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES

THOMAS J. VILSACK, GOVERNOR
SALLY J. PEDERSON, LT. GOVERNOR

PAUL W. JOHNSON, DIRECTOR

May 15, 2000

Shelly Heston
Climax Molybdenum Company
POBox 220
Fort Madison, IA 52627

Dear Shelly Heston:

We have received your request for issuance of Special Waste Authorization (SWA) for the disposal of Waste elemental sulfur.

We have reviewed your request and determined that this waste is not "Special Waste" requiring issuance of an SWA for disposal. The waste does not appear to be a type that presents a threat to human health or the environment has inherent properties, which make disposal in a sanitary landfill difficult to manage, or requires special handling during disposal to protect human health and the environment.

This waste may be disposed in a permitted sanitary landfill without a Special Waste Authorization (SWA). You should contact your landfill to see if they have any waste acceptance and handling criteria, which apply to this solid waste.

If you have questions, please contact Jim Thayer at 515-281-3426.

Sincerely,

Lavoy Haage

LAVOY HAAGE
SUPERVISOR
SOLID WASTE SECTION
LAND QUALITY BUREAU

C: Field Office 6

Records

Leroy Penrod, Great River Regional Waste Authority, 2092 303rd Avenue, Fort Madison, IA 52627-9751

Kjrsten Bobb, Great River Regional Waste Authority, 2092 303rd Avenue, Box 16, Fort Madison, IA 52627-9751

6222 FAX

B

CLIMAX MOLYBDENUM COMPANY
A subsidiary of phelps dodge Corporation

Climax Molybdenum Company
P.O. Box 220
Fort Madison, Iowa 52627
(319) 463-7151

May 9, 2000

00ENV-030

Mr. Jim Thayer
Iowa Department of Natural Resources
900 East Grand Avenue
Des Moines, IA 50319

Subject: Special Waste Authorization (#5607062597) for Climax Molybdenum Company

Dear Sir:

We are requesting a renewal of our existing special waste authorization for waste elemental sulfur. This material is generated from clean up of spilled material mixed with soil or tank clean out. The material is nonhazardous and cannot be reused in the plant because of soil or gravel contamination. The material has been disposed of periodically for several years at the Great River Regional Waste Authority (Lee County Sanitary Landfill #56-SDP-07-80P). The quantity disposed of during a years time varies from none to 100 tons.

If you have any questions please contact me at (319) 463-2224.

Sincerely,

Shelly Heston

Shelly Heston
Environmental Manager

SRB

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : General Trash

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: General Trash

Area of Generation: Plant Wide

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid material. General trash - rags, paper, wood, metal, office supplies, used filters

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)
- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)
- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)
- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to **Table 2**~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). General Trash

Reasoning: _____

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Great River Regional Wast. Permitted sanitary landfill

12/15/1999

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Used Oil filters

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Used oil filters

Area of Generation: Maintenance Shop

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Solid, crushed filter. All oil is drained to a used oil barrel and then filter is crushed.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☒ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☐ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2.~~ Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.).

Reasoning: All oil is drained and filter is crushed. No residual oil

Exclusion 40 CFR 261.4(b)(13)

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Locally permitted Sanitary landfill

12/15/99

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Landfill leachate

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Landfill Leachate

Area of Generation: Landfill

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Liquid leach from the company owned landfill where gypsum is disposed of.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- [x] Disposed of;
- [ ] Burned or incinerated;
- [ ] Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- [ ] Handled in a manner constituting disposal
- [ ] Burned for energy recovery
- [ ] Reclaimed
- [ ] Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- [ ] Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- [ ] Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] **(Check any that apply)**

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)

Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)

Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.

Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table 2~~. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☒ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Part of NPDES discharge

Reasoning: Material is hauled back to the plant and placed in the gypsum ponds. Material is leached from the gypsum in the landfill which is the same material that is in the gypsum ponds so it is included in the NPDES discharge.

Exclusion 40 CFR 261.4(a)(2)

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Outfall #1 NPDES discharge (Gypsum ponds)

9/9/2002

Hazardous Waste Determination Guidance Checklist

This checklist can be used as a tool to help classify waste materials and document the determination process. Federal and state EPA regulations require generators of *waste* to determine whether a waste is hazardous and document information used in the hazardous waste determination .

GENERAL INFORMATION

Plant Name : Climax Molybdenum Company

Waste Name : Used Oil

MATERIAL IDENTIFICATION

Provide general information related to the waste material that is generated. Reviewing the material safety data sheet(s) (MSDSs) and having knowledge of the process(es) and wastes generated may prove beneficial when completing this section.

Waste Stream Name or Waste Identification #: Used Oil

Area of Generation: Plant Maintenance, molysulfide process

Describe the waste material, including the physical state (i.e. solid, liquid, gas), known hazards (i.e. flammable, corrosive, toxic), expected or known constituents, and % if known. Specify the generation process including raw materials used, residuals (i.e. dissolved constituents and/or metals), etc.

Used oil generated from plant maintenance and the molysulfide process.

Hazardous Waste Determination Guidance Checklist

WASTE DETERMINATION (Check all that apply)

The first step in the classification process is to determine whether the material meets the definition of a waste. To make this determination, check each box that applies to the material. Once complete; review waste exclusions (40 CFR 261.4) to determine if the material is excluded from the definition of a waste. It is important to remember when proceeding through this section that the definition of a waste is very broad and includes solids, semi-solids, liquids, or confined gases.

The material is being abandoned (40 CFR 261.2 (b))

- ☐ Disposed of;
- ☐ Burned or incinerated;
- ☐ Accumulated, stored, or treated, but not recycled, before or in place of being discarded by being disposed of, burned or incinerated

The material is being recycled, or accumulated, stored or treated before recycling and is managed as indicated below (40 CFR 261.2 (c))

- ☐ Handled in a manner constituting disposal
- ☐ Burned for energy recovery
- ☒ Reclaimed
- ☐ Accumulated speculatively for the purpose of recycling

The material is inherently waste-like when recycled (40 CFR 261.2 (d))

- ☐ Federal EPA Hazardous Waste Code numbers F020, F021, F022, F023, F026, & F028
- ☐ Secondary materials fed to a halogen acid furnace that exhibit characteristics of a Hazardous waste, except for brominated material.

WASTE EXCLUSIONS (40 CFR 261.4)

There are some exclusions that pertain to wastes which are excluded from the definition of a waste and/or hazardous waste, such as domestic sewage, National Pollution Discharge Elimination System (NPDES) permitted discharges, spent sulfuric acid used to produce virgin sulfuric acid, radioactive materials, laboratory wastes, cement kiln dust, wastes generated in process units, household wastes, mining wastes, some scrap metals, and others. Review the exclusions listed in 40 CFR 261.4 and determine whether or not your material is excluded. Once the waste exclusions have been reviewed, proceed to check the box below which indicates the result of your waste determination.

None of the boxes were checked. Thus, the material is **not** considered a waste. **Proceed to the Determination Section.**

Hazardous Waste Determination Guidance Checklist

At least one box was checked. The material has been determined to be a waste. However, upon reviewing the exclusions in 40 CFR 261.4, it has been determined that the material is excluded from the definition of a waste. Therefore, the material is not considered a waste and is not a hazardous waste. **Proceed to the Determination Section.**

At least one box was checked. The material has been determined to be a waste and is not excluded from the waste definition per 40 CFR 261.4. To determine whether or not the waste is a hazardous waste, **Proceed to the next Section (Hazardous Waste Determination).**

HAZARDOUS WASTE DETERMINATION

FEDERAL RCRA LISTED WASTES [40 CFR 261.31-33] (Check any that apply)

This section was designed to assist you in determining whether or not your waste is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste. Review each step and refer to the attached lists or noted regulations in order to fully determine whether or not the waste or process is located on a list. Check each box that applies to your waste and indicate the Federal EPA Hazardous Waste Code (e.g. F006, U093…) in the space provided. When your waste/process has been matched against each list, a determination has been made, and the appropriate box(es) has been checked, proceed to **the next section**.

Process Wastes

- ☐ It is a listed waste from a **non-specific** (generic) process under the "F" listed waste codes [40 CFR 261.31] **WASTE CODE:** _____
- ☐ It is a listed waste from a **specific** process under the "K" listed waste codes [40 CFR 261.32] **WASTE CODE:** _____
- ☒ It is **not** a listed waste under the "F" or "K" listed waste codes.

Discarded Commercial Products/Off-spec Products/Container and Spill Residue

- ☐ The *sole active ingredient* is a listed non-process acute waste per 40 CFR 261.33 ("P" code) **WASTE CODE:** _____
  "P" code wastes are considered acutely hazardous wastes (AHW).
- ☐ The *sole active ingredient* is a listed non-process toxic waste per 40 CFR 261.33 ("U" code) **WASTE CODE:** _____
  "U" code wastes are used for wastes that are considered toxic, reactive, ignitable, or corrosive.
- ☒ It is **not** a listed waste under the "P" or "U" listed waste codes.
- ☐ None of the boxes were checked. Thus, the material is **not** considered a waste.

Note: if a listed ingredient is not the *sole active ingredient*, then it is not considered a "U" or "P" waste code.

Proceed to the next Section (Hazardous Waste Physical Characteristics) when complete.

HAZARDOUS WASTE PHYSICAL CHARACTERISTICS (Check all that apply)
Below are hazardous waste physical characteristics that may assist you in the process of properly determining whether your waste is hazardous. Reviewing MSDS(s) and other sources of information may be beneficial when completing this section, especially without the use of laboratory analyses. The characteristics of the waste may be obtainable through generator knowledge and/or laboratory analyses. However, it is important to remember that it is the sole responsibility of the generator to properly determine whether the waste is hazardous or not. Be sure you have data to back your determination!

The waste is **ignitable** per 40 CFR 261.21 (EPA Hazardous Waste Code: D001)

- ☐ Liquid with a flashpoint < 140°F
- ☐ Solid capable of causing fire by friction, absorption of moisture, or spontaneous chemical change
- ☐ Compressed gas as defined by 49 Code of Federal Regulations 49 CFR173.300 Material has a pressure > 40 psi @ 70°F or vapor pressure > 40 psi absolute @ 100°F
- ☐ Oxidizer as defined by 49 CFR 173.151
- Releases oxygen when reacting with another chemical
- Reacts with organic materials (e.g. oils, grease, solvents, paper, cloth, wood, etc.) resulting in fire or generation of heat
- ☐ Wastes which may meet this criteria include: solvents, paints, thinners, and adhesives

The waste is **corrosive** per 40 CFR 261.22 (EPA Hazardous Waste Code: D002)

- ☐ Aqueous (liquid) and has a pH < 2 (acid) or > 12.5 (base)
- ☐ Solid (non-liquid) when mixed with equal weight of water has a pH < 2 (acid) or > 12.5 (base)
- ☐ Dissolves/corrodes steel (SAE 1020) at a rate greater than .25 inch per year
- ☐ Wastes which may meet this criteria include: etchants, alkaline degreasers, acids and base

The waste is **reactive** per 40 CFR 261.23 (EPA Hazardous Waste Code: D003)

- ☐ Normally unstable & readily undergoes violent change without detonation
- ☐ Reacts violently with water, or forms potentially explosive mixtures with water
- ☐ Generates toxic gases, vapors or fumes when mixed with water or air
- ☐ Capable of detonation, explosive reaction or explosive decomposition
- ☐ Wastes which may meet this criteria include: chromic acids and cyanide compounds

The waste is **toxic** per 40 CFR 261.24 (EPA Hazardous Waste Code: Varies)
Determining whether or not a waste is hazardous due to its toxicity can be a very complicated process. The toxicity characteristic is the most complex characteristic to determine. This characteristic is based on whether or not a waste exceeds concentrations of certain metals and organics based on analytical results from laboratory analyses. The collection and submission of waste samples for each laboratory analysis can become an expensive endeavor. However, it is important to realize that the generator can save a significant amount of money by better understanding the process and the waste generated by the process. Thus, possibly eliminating or reducing the number of samples needed to properly characterize the waste.
Next, are some hazardous waste tables that may be used to assist you in properly characterizing waste streams. In the tables you will find the name of the constituent and the regulatory limit for that constituent and that particular test. During this phase there are

California (Non-RCRA) regulatory limits and Federal (RCRA) regulatory limits. So, be sure to select which test(s) will provide you with the best results to properly classify your waste. **The next five tables consist of substances which are known to be hazardous at/above certain regulatory concentrations. The following tables provide you with the constituents and their regulatory limits associated with a specific laboratory analysis. If you are using laboratory analysis results to aid in the determination of your waste, then proceed to check the appropriate box(es) for each constituent that meets and/or exceeds the regulatory limit in the, particular table. If you still have questions regarding toxicity analyses, then proceed to the last page where you can find some additional information regarding toxicity analysis for wastes.**

TABLE 1

Threshold Characteristic Leaching Procedure (TCLP) [RCRA] – This analysis helps determine whether a facility's waste is a RCRA hazardous waste and is the least expensive. This analysis should be the first step if you are uncertain what may be in your wastestream or you suspect that your wastestream contains any of the constituents listed below. Compare analytical data to the constituents listed below and determine whether they meet or exceed the regulatory limits in the table. Check the appropriate box(es). If no constituents are identified at or above the listed regulatory limit, ~~proceed to Table~~ 2. Note: The EPA Hazardous Waste Code (in parenthesis) is located next to the regulatory concentration limit for each constituent.

TCLP (mg/l) [40 CFR 261.24(b)(1)]

- ☐ Arsenic > 5.0 mg/l (D004)
- ☐ Barium >100 mg/l (D005)
- ☐ Benzene >0.5 mg/l (D018)
- ☐ Cadmium >1.0 mg/l (D006)
- ☐ Carbon Tetrachloride >0.5 mg/l (D019)
- ☐ Chlordane >0.03 mg/l (D020)
- ☐ Chlorobenzene >100 mg/l (D021)
- ☐ Chloroform >6.0 mg/l (D022)
- ☐ Chromium >5.0 mg/l (D007)
- ☐ o-cresol >200.0 mg/l (D023)
- ☐ m-cresol >200.0 mg/l (D024)
- ☐ p-cresol >200.0 mg/l (D025)
- ☐ Cresol >200.0 mg/l (D026)
- ☐ 2,4-D > 10.0 mg/l (D016)
- ☐ 1,4-Dichlorobenzene >7.5 mg/l (D027)
- ☐ 1,2-Dichloroethane >0.5 mg/l (D028)
- ☐ 1,1-Dichloroethylene >0.7 mg/l (D029)
- ☐ 2,4-Dinitrotoluene >0.13 mg/l (D030)
- ☐ Endrin >0.02 mg/l (D012)
- ☐ Heptachlor(and epoxide) >.008 mg/l (D031)
- ☐ Hexachlorobenzene >.13 mg/l (D032)
- ☐ Hexachlorobutadiene >0.5 mg/l (D033)
- ☐ Hexachloroethane >3.0 mg/l (D034)
- ☐ Lead > 5.0 mg/l (D008)
- ☐ Lindane >0.4 mg/l (D013)
- ☐ Mercury >0.2 mg/l (D009)
- ☐ Methoxychlor >10.0 mg/l (D014)
- ☐ Methyl ethyl ketone >200.0 mg/l (D035)
- ☐ Nitrobenzene >2.0 mg/l (D036)
- ☐ Pentachlorophenol >100.0 mg/l (D037)

- ☐ Pyridine >5.0 mg/l (D038)
- ☐ Selenium >1.0 mg/l (D010)
- ☐ Silver >5.0 mg/l (D011)
- ☐ Tetrachloroethylene >0.7 mg/l (D039)
- ☐ Toxaphene >0.5 mg/l (D015)
- ☐ Trichloroethylene >0.5 mg/l (D040)
- ☐ 2,4,5-Trichlorophenol >400.0 mg/l (D041)
- ☐ 2,4,6-Trichlorophenol >2.0 mg/l (D042)
- ☐ 2,4,5-TP (Silvex) >1.0 mg/l (D017)
- ☐ Vinyl Chloride >0.2 mg/l (D043)
- ☐ No testing was conducted.

ADDITIONAL INFORMATION (Check if applies)

This waste has been classified using some form of generator knowledge (MSDS, knowledge of similar wastes or process knowledge, etc.). See attached documents which support this determination.

DETERMINATION

The material is a **hazardous waste.**

The material is a **non-hazardous waste.**

Other (i.e. universal waste, special waste, etc.). Used oil

Reasoning: Used oil is collected and stored on site prior to an off-site facility picking it up for recycling.

Note: attach any and all documentation (i.e. MSDSs, laboratory analyses, generator knowledge, calibration records, etc.) associated with the determination of this waste.

This waste may be disposed of at the following facilities: Waste Oil Services

12-15-99

OIL WASTE SERVICES, INC.
FORMALLY LENZ OIL SERVICE PEORIA INC.
3001 S.W. Washington St.
Peoria, IL 61602
1-888-OIL-WASTE (645-9278)
IN AC 309 DIAL 637-2366

Federal EPA ID # ILD038411955

Ticket # 40824
Date 2-16-98
Route # 21
Trk Report # _____
Drivers Initials WEH

Hauler ID #0423

In Compliance With All New Regulations
Fast • Clean • Professional • Used Oil Recycling

Generator's Name Chimax
Street _____
City Ft. Madison State _____ Zip _____
Phone #1: _____ Facility Mrg. 1: _____
Phone #2: _____ Own/Gen. Mrg. 2 : _____

_____ total gals. on truck
600 gal. used oil at _____ ¢/gal. equals _____ p c
_____ gal. waste water at _____ ¢/gal. equals _____
_____ gal _____ at _____ ¢/gal. equals _____ p c
_____ _____ at _____ equals _____ p c
_____ hr. truck time at _____ /hr. equals _____
EPA Generator Cert. on file Y N TEST FEE _____
(If not get signed) (driver circle one) TOTAL _____
General Comments: _____

Coments for Invoice: _____

☒ We the generator of this waste hereby certify that we have not mixed any hazardous waste into the waste being picked up by Oil Waste Services, Inc., that would make this waste a hazardous waste under EPA Laws. This waste is being transported to Oil Waste Services, Inc. to be recycled in accordance with all federal , state, and local regulations as a non hazardous waste. We also hereby certify that the waste does not contain any PCB's and further agree to pay all costs associated with disposal of PCB contaminated waste if collected from above named facility.

This Waste Tested: ☒ Non Hazardous/under 1000 PPM Halogens
☐ Over 1,000 PPM _____ ☐ ESQG under 40CFR 261.5
☐ Rebutted Metalworking Oil ☐ Rebutted CFC Compressor Oil

X WEH _____
Signature

569-2830

JOIN BML
CLIMAX MOLY.
1-725-3267

MATERIAL SAFETY DATA SHEET

PRODUCT: #2 DIESEL FUEL

MANUFACTURER: Colorado Refining Company
A subsidiary of Total Petroleum, Inc.
ADDRESS: 5800 BRIGHTON BLVD.
COMMERCE CITY, CO. 80022

EMERGENCY PHONE NOS.
MEDICAL: 213/664-2121
(L.A. POISON CENTER 24 HR NO.)
CHEMTREC: 800/424-9300
BUSINESS: 303/295-4500

SECTION I - MATERIAL IDENTIFICATION

TRADE NAME: #2 DIESEL FUEL

PRODUCT CODE: AA1A001

GENERIC NAME: DIESEL FUEL NO. 2

MSDS CODE NO.: GPDFNAA1A001

CHEMICAL NAME: PETROLEUM DISTILLATE, STRAIGHT-RUN GAS OIL

CAS REGISTRY NO.: 68476-34-6

SYNONYMS: INTERMEDIATE STRAIGHT-RUN GAS OIL; PETROLEUM MID-DISTILLATE; TRUCK DIESEL FUEL

NIOSH REGISTRY NO.: NOT REG

CHEMICAL FAMILY: ALIPHATIC HYDROCARBONS.

CHEMICAL FORMULA: C11 TO C25 PETROLEUM HYDROCARBONS

SECTION II - HAZARD IDENTIFICATION

HEALTH/PHYSICAL HAZARDS: THIS MATERIAL IS A COMBUSTIBLE LIQUID, AN ASPIRATION HAZARD AND A SKIN IRRITANT. SIMILAR PETROLEUM DISTILLATES HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN LABORATORY ANIMALS. THERE IS NO DIRECT EVIDENCE THAT THIS MATERIAL CAUSES SKIN CANCER IN HUMANS.

HAZARD LISTING: NOT LISTED

OTHER: CPSC REQUIRES LABEL WARNING FOR "PETROLEUM DISTILLATES."

TANKS, PIPES AND CONTAINERS RETAIN MATERIAL OR RESIDUE. FAILURE TO EXERCISE CAUTION DURING CLEANING, REPAIR, OR SAMPLING CAN BE HAZARDOUS AND LEAD TO INJURY. SEE SECTIONS V, VIII, AND X.

SECTION III - HAZARDOUS INGREDIENTS AND RECOMMENDED EXPOSURE LIMITS

HAZARDOUS INGREDIENTS		RECOMMENDED EXPOSURE LIMITS		
CHEMICAL NAME	CAS REG. NO.	LIMIT TYPE	AMOUNT	AGENCY*
1) INTERMEDIATE STRAIGHT-RUN GAS OIL	64741-43-1	8-HR TWA	100PPM	X (i)

(i) RECOMMENDED BY MANUFACTURER.

* A=ACGIH C=CAL/OSHA M=MSHA O=OSHA X=OTHER

RECOMMENDED TANK, PIPE OR CONTAINER LABEL

PRODUCT: #2 DIESEL FUEL

PRODUCT CODE: AA1A001
MSDS CODE NUMBER: GPDFNAA1A001
MANUFACTURER'S NAME: Colorado Refining Company
A subsidiary of Total Petroleum, Inc.
ADDRESS: 5800 BRIGHTON BLVD.
COMMERCE CITY, CO. 80022

< LOGO >

PRODUCT: #2 DIESEL FUEL
MANUFACTURER: Colorado Refining Company A subsidiary of Total Petroleum, Inc.
ADDRESS: 5800 BRIGHTON BLVD.
COMMERCE CITY, CO. 80022

DANGER! ASPIRATION HAZARD-HARMFUL OR FATAL IF SWALLOWED. SKIN IRRITANT. POSSIBLE SKIN CANCER HAZARD BASED ON TESTS WITH LABORATORY ANIMALS. PROLONGED OR REPEATED SKIN CONTACT MAY INCREASE THE RISK OF SKIN CANCER.
COMBUSTIBLE LIQUID.

CAUTION: MISUSE OF EMPTY CONTAINERS CAN BE HAZARDOUS. HAVE COMMERCIALLY CLEANED BEFORE REUSE. KEEP CLOSED AND DO NOT USE TO STORE OR MIX OTHER MATERIALS. DO NOT CUT, WELD, PRESSURIZE OR ...SE EMPTY CONTAINERS TO ANY SOURCE OF HEAT OR FLAMES. RESIDUES MAY EMIT TOXIC OR FLAMMABLE ... WHICH MAY BE HARMFUL OR MAY IGNITE AND EXPLODE.

PRECAUTIONS: DO NOT SWALLOW. AVOID BREATHING MISTS OR PROLONGED BREATHING OF VAPORS.DO NOT GET IN EYE(S), ON SKIN OR ON CLOTHING. KEEP CONTAINERS CLOSED AND USE ONLY WITH ADEQUATE VENTILATION.KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND IGNITION SOURCES. WASH THOROUGHLY AFTER HANDLING. CLEAN OR LAUNDER CONTAMINATED SHOES AND CLOTHING BEFORE REUSE.

IN CASE OF FIRE: USE CARBON DIOXIDE, DRY CHEMICAL, FOAM OR WATER SPRAY.

FIRST AID: IF SWALLOWED: *ASPIRATION HAZARD*
DO NOT INDUCE VOMITING
GET IMMEDIATE MEDICAL AID.
IF INHALED: MOVE AWAY FROM EXPOSURE TO VAPORS OR MISTS. IF SYMPTOMS OF EXPOSURE DEVELOP, GET MEDICAL AID.
EYE CONTACT: FLUSH AFFECTED EYE(S) WITH WATER. IF IRRITATION DEVELOPS, GET MEDICAL AID.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND WASH SKIN WITH SOAP AND WATER. IF IRRITATION DEVELOPS AND PERSISTS, GET MEDICAL AID.

MEDICAL EMERGENCY: CONTACT LA POISON CENTER 24-HR EMERGENCY PHONE NO.: 213/664-2121
SPILL OR LEAK: CONTACT CHEMTREC 24-HR EMERGENCY PHONE NO.: 800/424-9300
KEEP OUT OF REACH OF CHILDREN
FOR MORE INFORMATION CONSULT THIS PRODUCT'S MSDS

PRODUCT CODE: AA1A001 BATCH NUMBER

©Copyright 1986 Health & Hazard Systems, 415 W. Foothill Blvd., Claremont, CA 91711

PRODUCT: #2 DIESEL FUEL

MSDS CODE NO: GPDFNAA14001

SECTION IV - HEALTH HAZARD INFORMATION

ORAL EFFECTS/EXPOSURE ROUTES: THIS MATERIAL IS AN AS ASPIRATION HAZARD, A SKIN IRRITANT AND MAY BE A SKIN CANCER HAZARD BASED ON TESTS WITH LABORATORY ANIMALS. PRIMARY EXPOSURE ROUTE IS SKIN CONTACT. INHALATION IF VAPORS OR MITS ARE GENERATED.

OCCULAR/EYE: THIS MATERIAL MAY CAUSE EYE IRRITATION. CONTACT WITH THE LIQUID OR ITS MISTS MAY CAUSE BURNING, TEARING, AND REDNESS.

DERMAL/SKIN: THIS MATERIAL IS A SKIN IRRITANT. PROLONGED OR REPEATED CONTACT MAY CAUSE BURNING, REDNESS, DRYING AND CRACKING OF THE SKIN, DERMATITIS AND SKIN DAMAGE.

INHALATION/BREATHING: EXPOSURE TO MISTS OR TO EXCESSIVE CONCENTRATIONS OF VAPORS GENERATED WHEN THIS MATERIAL IS HEATED MAY CAUSE IRRITATION OF THE NOSE, THROAT AND RESPIRATORY TRACT AND SIGNS OF CENTRAL NERVOUS SYSTEM DEPRESSION, I.E.,HEADACHE, NAUSEA, DROWSINESS AND DIZZINESS.

INGESTION/SWALLOWING: ACCIDENTALLY SWALLOWING THIS MATERIAL MAY CAUSE IRRITATION OF THE STOMACH AND DIGESTIVE TRACT. LARGER INGESTIONS MAY CAUSE SIGNS OF CENTRAL NERVOUS SYSTEM DEPRESSION, I.E., HEADACHE, NAUSEA, DROWSINESS AND DIZZINESS. THIS MATERIAL IS AN ASPIRATION HAZARD AND MAY ENTER THE LUNGS WHEN SWALLOWING OR VOMITING AND CAUSE SEVERE LUNG DAMAGE.

CHRONIC/OTHER: REPETITIVE, LONG-TERM SKIN APPLICATION OF SIMILARLY REFINED AND PROCESSED PETROLEUM DISTILLATES HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN LABORATORY ANIMALS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: PRE-EXISTING SKIN, LIVER, KIDNEY AND RESPIRATORY CONDITIONS.

SECTION V - SPECIAL HAZARDS/NON-ROUTINE OPERATIONS

HAZARDS/COMMENTS: TANKS, PIPES AND CONTAINERS CONTAIN MATERIAL OR ITS RESIDUE AND MAY CONTAIN TOXIC, IRRITATING, FLAMMABLE OR EXPLOSIVE VAPORS AT HIGH CONCENTRATIONS AND HIGH PRESSURES. EXPOSURE TO THESE VAPORS CAN BE HAZARDOUS AND MAY RESULT IN SERIOUS PHYSICAL HARM OR INJURY. (SEE SECTION X).

SECTION VI - EMERGENCY AND FIRST AID PROCEDURES

ATTENTION: IF VICTIM IS NOT BREATHING OR IF BREATHING DIFFICULTIES DEVELOP, ARTIFICIAL RESPIRATION OR OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL.

OCCULAR/EYE CONTACT: FLUSH AFFECTED EYE(S) WITH WATER. IF IRRITATION DEVELOPS, SEEK MEDICAL ASSISTANCE.

DERMAL/SKIN CONTACT: IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND FLUSH CONTACT AREAS WITH WATER. THOROUGHLY WASH SKIN WITH SOAP AND WATER. IF IRRITATION DEVELOPS AND PERISTS, SEEK MEDICAL ASSISTANCE.

INHALATION/BREATHING: MOVE AWAY FROM SOURCE OF EXPOSURE TO VAPORS OR MIST AND INTO FRESH AIR. IF SYMPTOMS OF EXPOSURE DEVELOP, SEEK MEDICAL ASSISTANCE.

INGESTION/SWALLOWING: *DO NOT INDUCE VOMITING/ASPIRATION HAZARD* IF VICTIM IS CONSCIOUS AND ALERT, GIVE MILK OR WATER TO DRINK. SEEK IMMEDIATE MEDICAL ASSISTANCE.

COMMENTS/PHYSICIAN INFORMATION: THIS MATERIAL IS A LOW-VISCOSITY LIQUID MIXTURE OF PETROLEUM HYDROCARBONS WITH A LOW ORDER OF ACUTE TOXICITY AND LOW VOLATILITY. IT IS AN ASPIRATION HAZARD.

SECTION VII - CHEMICAL REACTIVITY INFORMATION

ILITY: STABLE UNDER NORMAL CONDITIONS OF STORAGE AND HANDLING.

REACTIVITY: REACTS VIGOROUSLY WITH STRONG OXIDIZING AGENTS.

INCOMPATABILITY: INCOMPATIBLE WITH STRONG OXIDIZING AGENTS.

HAZARDOUS REACTION/DECOMPOSITION PRODUCTS: BURNING PRODUCES CARBON DIOXIDE AND CARBON MONOXIDE.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:THIS MATERIAL DOES NOT POLYMERIZE.

SECTION VIII - FIRE AND EXPLOSION HAZARD INFORMATION

NFPA RATING: HEALTH 2 FLAMABILITY 2 REACTIVITY 0
FLASH POINT (METHOD): 125F/TCC (MINIMUM) FIRE PT./AUTOIGNITION TEMP (F): 494*
FLAMMABLE LIMITS (% BY VOLUME/AIR): LOWER: 0.5%* UPPER: 5.0%*
* DATA IS FOR GAS OIL AND FOR NO.2 FUEL OIL.
FIRE/EXPLOSION HAZARDS: THIS MATERIAL IS A MODERATE FIRE AND EXPLOSION HAZARD AND MAY BE IGNITED BY ANY IGNITION SOURCE ABOVE ITS FLASH POINT.VAPORS MAY TRAVEL TO IGNITION SOURCE AND FLASH BACK. CONTAINERS MAY EXPLODE IN FIRE. A VAPOR EXPLOSION HAZARD INDOORS, OUTDOORS OR IN SEWERS. EMPTY CONTAINERS RETAIN MATERIAL RESIDUE AND, IF HEATED, MAY GENERATE VAPORS WHICH CAN IGNITE AND EXPLODE.
COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE AND WATER VAPOR.

GUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND WATER SPRAY.

FIRE FIGHTING PROCEDURES: WEAR PROTECTIVE EQUIPMENT AND CLOTHING WHEN FIGHTING FIRES, INCLUDING A SELF-CONTAINED BREATHING APPARATUS FOR FIRE IN ENCLOSED SPACES. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS, TO DILUTE AND DISPERSE VAPORS, PROTECT PERSONNEL, AND TO FLUSH UNIGNITED SPILLS FROM FIRE.

SECTION IX - PERSONAL PROTECTION AND ENGINEERING CONTROLS

EYE AND FACIAL PROTECTION: CHEMICAL GOGGLES ARE RECOMMENDED TO PREVENT EYE CONTACT.

SKIN PROTECTION: PROTECTIVE GLOVES AND CLOTHING ARE RECOMMENDED TO PREVENT SKIN CONTACT. BARRIER CREAMS SPECIFIC FOR PETROLEUM-BASED MATERIALS MAY BE USED WHEN GLOVES ARE IMPRACTICAL.

RESPIRATORY PROTECTION: IN SITUATIONS WHERE VAPOR CONCENTRAIONS MAY EXCEED THE RECOMMENDED EXPOSURE LIMITS, A NIOSH-APPROVED ORGANIC VAPOR CARTRIDGE RESPIRATOR SHOULD BE WORN. USE SELF-CONTAINED SUPPLIED-AIR RESPIRATOR FOR EMERGENCIES.

VENTILATION: GENERAL DILUTION OR MECHANICAL VENTILATION OR EXPLOSION-PROOF LOCAL EXHAUST IS RECOMMENDED TO MAINTAIN VAPOR CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS.

OTHER: AN EYE WASH AND A SOURCE OF RUNNING WATER SHOULD BE AVAILABLE TO FLUSH OR WASH THE EYES AND SKIN.

SECTION X - STOREAGE AND HANDLING DURING ROUTINE AND NON-ROUTINE OPERATIONS

ROUTINE OPERATIONS: USE IN A WELL-VENTILATED AREA AND WEAR RECOMMENDED PROTECTIVE EQUIPMENT AND CLOTHING. USE EXPLOSION-PROOF TOOLS AND EQUIPMENT. AVOID BREATHING VAPORS OR MISTS AND PROLONGED OR REPEATED SKIN CONTACT. WASH THOROUGHLY AFTER HANDLING. CLEAN OR LAUNDER CONTAMINATED SHOES AND CLOTHING BEFORE REUSE. LABEL ALL UNATTENDED CONTAINERS.

NON-ROUTINE OPERATIONS: ENCLOSED OR HEAD SPACES IN MATERIAL TANKS, PIPES OR CONTAINERS MAY CONTAIN HAZARDOUS VAPOR CONCENTRATIONS. EXERCISE CAUTION AND WEAR RECOMMENDED PROTECTIVE EQUIPMENT AND CLOTHING WHEN: 1.) OPENING VALVES, TANK OR CONTAINER LIDS; 2.) WHEN ENTERING EMPTY TANKS OR 3.) DURING ANY OPERATIONS SUCH AS REPAIR, CLEANING, MAINTENANCE OR SAMPLING WHERE THERE IS A POTENTIAL FOR EXPOSURE TO THESE VAPORS.

STORAGE: STORE IN CLOSED CONTAINERS IN COOL, DRY, WELL-VENTILATED AREAS AWAY FROM SOURCES OF HEAT AND IGNITION AND STRONG OXIDIZING AGENTS. ELECTRICALLY BOND AND GROUND CONTAINERS WHEN TRANSFERRING MATERIAL. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

MISUSE OF EMPTY CONTAINERS CAN BE HAZARDOUS. COMPLETELY DRAIN AND COMMERCIALLY CLEAN BEFORE REUSE. KEEP CLOSED AND DO NOT USE TO STORE OR MIX OTHER MATERIALS BEFORE HAVING COMMERCIALLY CLEANED. DO NOT CUT, WELD, DRILL OR EXPOSE TO HEAT OR FLAME. VAPORS MAY BE HAZARDOUS.

SECTION X1 - SPILL, LEAK AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURES: EVACUATE AREA FOR LARGE SPILLS. WEAR RECOMMENDED PROTECTIVE EQUIPMENT AND CLOTHING. PROVIDE EXPLOSION-PROOF VENTILATION. ELIMINATE OR REMOVE ALL IGNITION SOURCES. DO NOT ALLOW SPILLS TO ENTER SEWERS, STREAMS OR SURFACE WATERS. DIKE AND CONTAIN SPILLS. PICK UP LARGE SPILLS FOR LATER RECLAMATION AND DISPOSAL. USE INERT ABSORBENT TO PICK UP SMALL SPILLS OR RESIDUE AND COLLECT FOR LATER DISPOSAL.

DISPOSAL PROCEDURES: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. EMPTY CONTAINERS SHOULD BE COMMERCIALLY CLEANED AND RECONDITIONED BEFORE REUSE.

SECTION X11 - PHYSICAL DESCRIPTION AND PROPERTIES

DESCRIPTION: A CLEAR, AMBER-COLORED LIQUID, WITH A FAINT PETROLEUM ODOR.

MELTING POINT:	NA	**SOLUBILITY (WATER):**	NEGLIGILBLE
BOILING POINT/RANGE:	350-700F	**pH:**	NA
VAPOR PRESSURE:	LOW	**SPECIFIC GRAVITY:**	0.85-0.90
% VOLATILE BY VOL:	LOW VOLATILITY	**API GRAVITY:**	25-35
VAPOR DENSITY:	HEAVIER THAN AIR	**VISCOSITY:**	33-40 SSU @ 100F
EVAPORATION RATE:	SLOWER THAN BUAC	**OTHER:**	NONE

MSDS CODE NO: GPDFNAA1A001
REPLACES MSDA CODE NO: NEW

NEW/REVISION DATE: 10/06/86
ORIGIONAL DATE: 06/15/86

PREPARED BY: D.C. MARKIE **DATE:** 06/15/86
APPROVED BY: D.C. MARKIE **DATE:** 11/10/86

PREPARED UNDER CONTRACT TO HEALTH & HAZARD SYSTEMS WHO ASSUMES LIABILITY FOR THE INFORMATION CONTAINED HEREIN. DIRECT INQUIRIES OR COMMENTS REGARDING INFORMATION TO :

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HEALTH & HAZARD SYSTEMS
415 WEST FOOTHILL BLVD.
CLAREMONT, CA. 91711
PHONE NO. 714/621-9986

HydroCal 60	HMIS RATING 1-H 1-F 0-R

CALUMET REFINING COMPANY
a division of Calumet Industries, Inc.

14000 MACKINAW AVE., CHICAGO, ILLINOIS 60633
TELECOPIER 312/862-4913 TWX 9106510003
312/862-9100

MATERIAL SAFETY DATA SHEET

SECTION 1: DESCRIPTION

PRODUCT NAME	HydroCal 60	DOT PROPER SHIPPING NAME	Not Listed
CAS REGISTRY NO.	64742-53-6	DOT HAZARD CLASS	Non-Hazardous
CHEMICAL FAMILY	Petroleum Hydrocarbon	DATE September 1989	BY JOHN B. HARRIS, III

SECTION 2: INGREDIENTS

COMPONENT	%	
Hydrotreated Light Naphthenic Distillate	100	
or		
(1) Possible blend of:		
Severely Hydrotreated Light Naphthenic Distillate		Cas No. 64742-53-6
Severely Hydrotreated Heavy Naphthenic Distillate		Cas No. 64742-52-5
Severely Hydrotreated Light Distillate		Cas No. 64742-47-8

SECTION 3: PHYSICAL DATA

Boiling Point °C/°F	IBP Above 176/350 ASTM D2887	Pour Point °C/°F	-40/-40 max. ASTM D97
Vapor Pressure mm Hg @ 20°C	Below 0.5 Isoteniscope	Evaporation Rate	Negligible
Vapor Density (Air = 1)	Above 5	Specific Gravity	0.9
Solubility in Water	Not Soluble		
Appearance	Clear, pale straw to water white liquid	Odor	Mineral Oil

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point °C/°F	Above 94/200 Pensky-Martens Closed Cup — Material may ignite at or above the flash point if an ignition source is present.
Extinguishing Media	Dry chemical, carbon dioxide, water fog and foam.
NOTE:	Water, fog and foam may cause frothing and spattering.
Special Fire Fighting Procedures	Use water spray to cool containers exposed to flames. Fire fighting personnel should wear respiratory protection.(positive pressure if available).
Unusual Fire and Explosion Hazards	Product of combustion include fumes, smoke and carbon monoxide.

161,849

10,454
073

CALUMET LUBRICANTS CO.

10234 Hwy. 157
Princeton, LA 71067-9172
Phone: 318/949-2421
Fax: 318/949-2543

Certificate of Analysis

Commodity: Hydrocal 60
Consignee: HENDERSON MINE
Destination: DENVER, CO
Calumet Order No.: 518978
Net Gallons: 19870

Shipping Data: 09/27/93

Routing: LA SHRV KCS KC UP
Customer Order No.: 6579 REL 15
Tank Car/Truck: T-260223

Properties	Minimum	Maximum	Tested
Viscosity, CST @ 40C, D445.....			9:28
Viscosity, SUS @ 100F, D2161.....	58.0	63.0	58.8 ✓ 9/28
Viscosity, SUS @ 210F, D2161.....			34.1
Viscosity Index, D2270.....			46
Gravity, API, D287.....			26.7 ✓
Flash, COC, C(F), D92.....	132(270)		(280) ✓
Pour, C(F), D97.....			(-80)
Color, D1500.....		0.5	L0.5
Aniline Point, C(F), D611.....			75.2

Laboratory Agent

89-27-1992 14:37 [redacted] 3189492421 CALUMET-Princeton, LA P. 02/02

8. Exempt wastes.

See response to question 7.

9. Identify all wastes in your response to 7 that have been disposed of off-site in the last 5 years. See Section 9.