GRENADA COUNTY - TIE PLANT MS
KOPPERS INC
COMPLIANCE
MSD007027543
1988 AI 00876

# Koppers Inc

## General Information

| ID | Branch | SIC | County | Basin | Start | End |
|---|---|---|---|---|---|---|
| 876 | Energy and Transportation | 2491 | Grenada | Yazoo River | 11/09/1981 | |

## Address

| Physical Address (Primary) | Mailing Address |
|---|---|
| 1 Koppers Drive<br>Tie Plant, MS 38960 | PO Box 160<br>Tie Plant, MS 38960 |

## Telecommunications

| Type | Address or Phone |
|---|---|
| Work phone number | (662) 226-4584, Ext. 11 |

## Alternate / Historic AI Identifiers

| Alt ID | Alt Name | Alt Type | Start Date | End Date |
|---|---|---|---|---|
| 2804300012 | Koppers Inc | Air-AIRS AFS | 10/12/2000 | |
| 096000012 | Koppers, Inc. | Air-Title V Fee Customer | 12/11/2006 | |
| 096000012 | Koppers Industries, Inc. | Air-Title V Operating | 03/11/1997 | 03/01/2002 |
| 096000012 | Koppers Industries, Inc. | Air-Title V Operating | 01/13/2004 | 03/26/2007 |
| 096000012 | Koppers Inc | Air-Title V Operating | 03/26/2007 | 01/01/2009 |
| MSR220005 | Koppers Industries, Inc. | GP-Wood Treating | 09/25/1992 | |
| MSD007027543 | Koppers Industries, Inc. | Hazardous Waste-EPA ID | 08/27/1999 | |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 06/28/1988 | 06/28/1998 |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 11/10/1999 | 03/26/2007 |
| HW8854301 | Koppers, Inc. (Owner) | Hazardous Waste-TSD | 03/26/2007 | 09/30/2009 |
| 876 | Koppers Industries, Inc. | Historic Site Name | 11/09/1981 | 12/11/2006 |
| 876 | Koppers, Inc. | Official Site Name | 12/11/2006 | |
| MSP090300 | Koppers Industries, Inc. | Water-Pretreatment | 11/14/1995 | 11/13/2000 |
| MSP090300 | Koppers Industries, Inc. | Water-Pretreatment | 09/18/2001 | 08/31/2006 |
| MSP090300 | Koppers Inc | Water-Pretreatment | 03/26/2007 | 02/28/2012 |
| MSU081080 | Koppers Industries, Inc. | Water-SOP | 11/09/1981 | 11/30/1985 |

## Regulatory Programs

| Program | SubProgram | Start Date | End Date |
|---|---|---|---|
| Air | Title V - major | 06/01/1900 | |
| Hazardous Waste | Large Quantity Generator | 08/27/1999 | |
| Hazardous Waste | TSD - Not Classified | 06/28/1988 | |
| Water | Baseline Stormwater | 01/01/1900 | |
| Water | PT CIU | 11/14/1995 | |
| Water | PT CIU - Timber Products Processing (Subpart 429) | 11/14/1995 | |
| Water | PT SIU | 11/14/1995 | |

## Locational Data

| Latitude | Longitude | Metadata | S / T / R | Map Links |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| 33 ° 44 ' 3 .00 (033.734167) | 89 ° 47 ' 8 .06 (089.785572) | **Point Desc:** PG- Plant Entrance (General). Data collected by Mike Hardy on 11/8/2005. Elevation 223 feet. Just inside entrance gate.<br><br>**Method:** GPS Code (Psuedo Range) Standard Position (SA Off)<br>**Datum:** NAD83<br>**Type:** MDEQ | Section:<br>Township:<br>Range: | SWIMS<br>TerraServer<br>Map It |

4/3/2007 12:58:30 PM

# Mississippi Department of Environmental Quality
# Office of Pollution Control

## I-sys 2000 Master Site Detail Report

## Site Name: Koppers Industries Inc

**PHYSICAL ADDRESS**

| | |
|---|---|
| LINE 1: | Tie Plant Road |
| LINE 2: | |
| LINE 3: | |
| MUNICIPALITY: | Tie Plant |
| STATE CODE: | MS |
| ZIP CODE: | 38960- |

**MAILING ADDRESS**

| | |
|---|---|
| LINE 1: | PO Box 160 |
| LINE 2: | |
| LINE 3: | |
| MUNICIPALITY: | Tie Plant |
| STATE CODE: | MS |
| ZIP CODE: | 38960- |

**OTHER INFORMATION**

| | |
|---|---|
| MASTER ID: | 000876 |
| COUNTY: | Grenada |
| REGION | NRO |
| SIC 1: | 2491 |
| AIR TYPE: | TITLE V |
| HW TYPE: | TSD |
| SOLID TYPE: | |
| WATER TYPE: | INDUSTRIAL |
| BRANCH: | Energy |
| ECED CONTACT: | Collier, Melissa |
| BASIN: | |

**AIR PROGRAMS** ☑ SIP ☐ PSD ☐ NSPS ☐ NESHAPS ☐ MACT

# Mississippi Department of Environmental Quality
## Office of Pollution Control

### Pemits

| PROGRAM | PERMIT TYPE | PERMIT # | MDEQ PERMIT CONTACT | ACTIVE |
|---|---|---|---|---|
| AIR | TITLE V | 096000012 | Burchfield, David | YES |
| WATER | PRE-TREATMENT | MSP090300 | Collins, Bryan | YES |
| HAZ. WASTE | TSD | HW8854301 | | YES |
| HAZ. WASTE | EPA ID | MSD007027543 | | YES |
| HAZ. WASTE | TSD | HW8854301 | Stover, Wayne | YES |

### Compliance Actions

| MEDIA | ACTIVITY TYPE | SCHEDULED | COMPLETED | INSPECTED B |
|---|---|---|---|---|
| HAZ WASTE | Financial Record Review | 1/18/00 | 1/18/00 | Twitty, Russ |
| WATER | CMI - PRETREATMENT | | | Whittington, Darryail |
| WATER | CEI - PRETREATMENT | 9/30/00 | | Twitty, Russ |
| WATER | CEI - NA | 9/30/00 | | Twitty, Russ |
| HAZ WASTE | Compliance Evaluation Inspection | 9/30/00 | | Twitty, Russ |
| AIR | State Compliance Inspection | 9/30/00 | | Twitty, Russ |
| WATER | CEI - NA | 3/2/99 | 3/2/99 | Twitty, Russ |
| HAZ WASTE | Compliance Evaluation Inspection | 3/2/99 | 3/2/99 | Twitty, Russ |
| AIR | State Compliance Inspection | 3/2/99 | 3/2/99 | Twitty, Russ |

# KOPPERS COMPLIANCE DOCKET

4/16/87 Bureau administers extension to Koppers.

4/16/87 Document transmittal from Koppers

5/20/87 Letter from Sam Mabry to EPA about hazardous constituent detection limits.

5/20/87 Inspection of facility

6/26/87 Hazardous Waste Ground Water Task Force Evaluation

6/29/87 Memorandum from G. Payne - strategy to transfer responsibility of Koppers Project to Kim Ehlert.

7/10/87 G.W. task force report for Koppers Co.

3/5/87 Memorandum from J. Hardage documenting Koppers spray field demonstration.

12/3/87 Letter to Koppers from BPC explaining commencement order #5 (1208-87)

12/4/87 Letter to Koppers from BPC commenting on G.W. monitoring Work Plan for boiler ash landfarm.

12/7/87 Document transmittal to EPA - GW monitoring Plan + Closure Plan for Boiler Ash Landfarm. (2 documents)

1/25/88 Letter to Koppers from BPC explaining deficiencies in Spray Field Characterization document.

12/8/87 Letter to Koppers from BPC commenting Order 1280-87

2/25/88 Sent Koppers Draft Permit to EPA for review.

2/29/88 Sent DNR comments on Solid waste management investigation to EPA.

3/2/88 Sent draft Permit to Koppers for comments.

3-9-88 Received letter from Koppers responding to BPC letter of 1/25/88 and including Notice of Intent to Sue addressed to Lee Thomas of EPA.

3-24-88 Received FAX from Koppers concerning Part A.

# KOPPERS COMPLIANCE DOCKET

| | |
|---|---|
| 2/10/87 | Letter to Keystone Environmental Resources, Inc. from Jim Hardage summarizing major conclusions resulting from 2/3/87 |
| 2/17/87 | Notes of Koppers meeting at EPA 2-17-87. |
| 2/18/87 | Phone conversation between Koppers and Sam H, Caleb D, Jim H, Gary P. |
| 2/18/87 | Koppers submitted Report of Findings, Hydrogeologic Investigation. |
| 2/27/87 | Letter to Sam H. from EPA regarding regulation of boiler ash under ~~the resources for~~ RCRA. |
| 3/26/87 | Notes on the Koppers Ash closure |
| 2/25/87 | Phone conversation with Ron Morosky and Caleb D. |
| 3/5/87 | Memorandum from Jim Hardage observing field work related to Koppers spray field demonstration. |
| 3/11/87 | Letter from EPA to Sam Mayberry stating that the flash produced at Koppers is a hazardous waste. |
| 3/23/87 | Letter to Jim H. from Koppers stating that the ash is not a hazardous waste. |
| 3/25/87 | Transmittal of information from Jim H. to Koppers. |
| 3/27/87 | Transmittal of information from Jim H. to Koppers. |
| 4/3/87 | Commission Order # 1208-87 and 1209-87 |
| 4/13/87 | Request for extension from Koppers to Sam Mayberry |
| 4/14/87 | Document transmittal Part B Permit Application Closure and Post Closure Plans |

NATIONAL 42-182 100 SHEETS Made in U.S.A.

Koppers Compliance Docket

3/23/88 [illegible] comments on [illegible] Draft Report.

4/6/88 Sent letter to Koppers extending their financial assurance deadline until May 15, 1988.

NATIONAL 42-182 100 SHEETS Made in U.S.A.

From the desk of
Rock Clayton

1-16-19

DAVE

THESE ARE THE MANIFESTS + ANALYSIS REPORTS RECEIVED AT GRENADA IN 1988. IF YOU NEED ANYTHING ELSE GIVE ME A CALL.

Rock

RECEIVED
JAN 17 1989
Dept. of Natural Resources
Bureau of Pollution Control

**DAVID J. BOCKELMANN**
**Environmental Scientist**

**Bureau of Pollution Control**
**P.O. Box 10385**
**Jackson, Mississippi 39209**

**(601) 961-5171**

INTERNATIONAL MATEX TANK TERMINALS
ST. ROSE, LA

DATE 1-25-88

ACCOUNT OF Koppers Co.

P.O. NO.

COMMODITY Drums (77)

CARRIER DART

TRACTOR NO. 3572 A

TRAILER NO. ~~3832~~ 3572

TANK NO.

WAYBILL KG 356739

TEMPERATURE

| DATE | TIME | | |
|---|---|---|---|
| 1-25-88 | 12:15PM | 56720 | lb GROSS |
| 1-25-88 | 8:22AM | 31320 | lb TARE |
| | | 25,400 | lb NET |

SHIPPER

WEIGHER

REMARKS

FAIRBANKS CAT. 083600

| | | | |
|---|---|---|---|
| 77 drums | Creosote | no [illegible] | 25,400 |

RECEIVED ABOVE PROPERTY IN GOOD CONDITION

Koppers Co. Inc.
FULL NAME OF RECEIVING COMPANY

Gary McClelland
NAME OF RECEIVING CLERK

1-26-88
DATE

I.C.C. REGULATIONS REQUIRE THAT
ALL FREIGHT CHARGES MUST BE PAID WITHIN 7 DAYS

CONSIGNEE'S COPY

C.O.D. $

☐ TO BE PAID BY SHIPPER ☐ CONSIGNEE

MIT TO

PLACARDED TENDERED OR

RAIL PLACARD-TRUCK

† WEIGHED AT IMPT ST. ROSE, LA. BY EG

GROSS 56,720

TARE 31,320

ALLOWED

NET WT. 25,400

RATED SHELL CAPACITY (GALS.)

SHELL OUTAGE

DOME INNAGE

TOTAL @ % W

PERMANENT POST OFFICE ADDRESS OF SHIPPER
416 SEVENTH AVENUE PITTSBURGH PA 15219

† FGT. WGT. FACTOR (#/G)

Received $ to apply in prepayment of the charges on the property described hereon

Agent or Cashier

PER

(The signature here acknowledges only the amount prepaid.)

CHARGES ADVANCED $

ubject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to e consignee without recourse on the consignor, the consignor shall sign the following statement he carrier shall not make delivery of this shipment without payment of freight and all ther lawful charges.

Signature of Consignor ) KOPPERS COMPANY, INC. per → See ★ below

lote. Where the rate is dependent on value, shippers are required to state specifically in writing released or declared value of the property. The agreed or declared value of the property is hereby ted by the shipper to be not exceeding 165 cents per pound for each distribution package.

is is to certify that the above named materials are properly classified, described, packaged, arked and labeled and are in proper condition for transportation according to the applicable gulations of the Department of Transportation.

OPPERS COMPANY, INC., Shipper.

I Shipper hereby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with [illegible] Bureau having jurisdiction.

X [illegible] DART

PER [illegible]

AGENT

PER

★ Signature of Shipper's agent next above is also intended as execution of Section 7. Signature above must appear in longhand.

NOTICE OF SHIPMENT AND MEMO COPY OF BILL OF LADING

70 REV. 13 20M 11 85 Printed in U.S.A.

FOR CHEMICAL EMERGENCIES, SPILL, LEAK, FIRE OR EXPOSURE CALL CHEMTREC 800-424-9300 DAY OR NIGHT

INTERSTATE
OHIO WATS

**DART TRUCKING COMPANY, INC.**
P.O. BOX 89 CANFIELD, OHIO 44406
216-533-9841

**DELIVERY RECEIPT**
NO. [redacted]
58530

SHIPPER: IMTT
[illegible] COMPANY, INC.
Rose, LA.

CONSIGNEE: Koppers Co. Inc.
The Plant
Grenada, MS

| | | | | |
|---|---|---|---|---|
| [illegible] | 030 | | 3572 | JB & ML McCurley |
| 1/26/88 | KG 356759 | | | |

☐ PREPAID ☐ COLLECT — HAZARDOUS MATERIALS ☐

| DESCRIPTION OF ARTICLES AND SPECIAL MARKS | WEIGHT | RATE | AMOUNT |
|---|---|---|---|
| 77 drums Creosote — As per Dave King 1-26-88 by phone no manifest needed UK Lindsey | 25,400 | | |

RECEIVED ABOVE PROPERTY IN GOOD CONDITION

Koppers Co. Inc.
FULL NAME OF RECEIVING COMPANY

Gary McClelland
NAME OF RECEIVING CLERK

1-26-88
DATE

I.C.C. REGULATIONS REQUIRE THAT
ALL FREIGHT CHARGES MUST BE PAID WITH

2/1/88
Dave King
NO MANIFEST REQ

He will let me know who to Bill
31 Rock

CONSIGNEE'S COPY

D. $ — ☐ TO BE PAID BY SHIPPER ☐ CONSIGNEE

PLACARDED — TENDERED OR RAIL

† WEIGHED AT IMTT ST. ROSE, LA. BY

GROSS 56,720 — RATED SHELL CAPACITY (GALS.)

TARE 31,320 — SHELL OUTAGE

ALLOW — DOME INNAGE

NET WT. 25,400 — TOTAL @ ° F % W

Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to ee without recourse on the consignor, the consignor shall sign the following statement shall not make delivery of this shipment without payment of freight and all ul charges.

KOPPERS COMPANY, INC.
per → See ★ below

the rate is dependent on value, shippers are required to state specifically in writing declared value of the property. The agreed or declared value of the property is hereby shipper to be not exceeding 165 cents per pound for each distribution package.

tify that the above named materials are properly classified, described, packaged, labeled and are in proper condition for transportation according to the applicable the Department of Transportation.

OMPANY, INC., Shipper.

PERMANENT POST OFFICE ADDRESS OF SHIPPER
436 SEVENTH AVENUE PITTSBURGH PA 15219

† Shipper hereby certifies that this shipment is correctly described, correct weight is shown and is subject to verification according to agreement with the Interstate Commerce Bureau having jurisdiction.

X [redacted] DART
PER

Agent or Cashier
PER
(The signature here acknowledges only the amount prepaid.)
CHARGES ADVANCED
$

of Shipper's agent next above is also intended as execution of Section above must appear in longhand.

PER — AGENT

20M 11 85 Printed in U.S.A.

FOR CHEMICAL EMERGENCIES, SPILL, LEAK, ...
EXPOSURE CALL ...

NOTICE OF SHIPMENT AND ...

# MEMORANDUM COPY OF STRAIGHT BILL OF LADING—SHORT FORM

**This Memorandum** is an acknowledgment that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

AGENTS NO.

SHIPPERS ORDER NO.

CONSIGNEES ORDER NO.

SHIPPERS NO. KG35675S

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Bill of Lading,

FROM KOPPERS COMPANY, INC. AT TIPT ST. ROSE, LA. 1/25/88 DATE

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to by the shipper and accepted for himself and his assigns.

* The fibre boxes and/or the fibre boxes drums, pails or cans and or the paper bags used for this shipment conform to the specifications set forth in the box maker's certificate thereon, if any required, and all other requirements of the Uniform or National Motor Freight Classifications.

* Shipper's imprint in lieu of stamp, not a part of bill of lading approved by the Interstate Commerce Commission

CONSIGNED TO KOPPERS CO. INC.

STREET ADDRESS TIE PLANT ROUTE 68

DESTINATION GRENADA, MS.

NAME OF CARRIER ~~[illegible]~~ DART

CAR OR VEH. IN. & NO.

CAR OR VEH. SEAL NO.

ROUTE

CONSIGNEE'S NOTIFICATION ADDRESS

IF CHARGES ARE TO BE PREPAID WRITE OR STAMP HERE "TO BE PREPAID"

| PACKAGES NO. AND KIND | HM | DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE) / DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS | | WEIGHT (SUBJECT TO CORRECTION) | CLASS OR RATE | ✓ |
|---|---|---|---|---|---|---|
| | | CORROSIVE SOLID, NOS/CORROSIVE MATERIAL/UN 1759/OIL CRUDE COAL TAR | 1 | | | |
| | | NAPHTHALENE/ORM-A/UN 1334 | 2 | | | |
| | | NAPHTHALENE/ORM-A/UN 1334/CRUDE NAPHTHALENE | 3 | | | |
| | | OIL, CREOSOTE COAL TAR SOLUTION | 4 | | | |
| | | TAR OR PITCH, COAL OR PETROLEUM, PAVING, ROOFING | 5 | | | |
| | | CRUDE COAL TAR | 6 | | | |
| | | OIL, CRUDE COAL TAR | 7 | | | |
| | | COAL TAR DISTILLATE/FLAMMABLE LIQUID/UN 1136/CRUDE HEAVY SOLVENT NAPHTHA | 8 | | | |
| 77 DRUMS | | BINDER, ELECTRODE | 9 | | | |
| | | OIL, CREOSOTE | 10 | | | |
| | | COATING SOLUTION/FLAMMABLE LIQUID UN 1139/ ROOFING COATING, ASPHALT, PITCH OR TAR BASE | 11 | | | |
| | | ROOFING COATING ASPHALT, PITCH OR TAR BASE | 12 | | | |
| | | CEMENT, ROOFING LIQUID/FLAMMABLE LIQUID/NA 1133/ROOFING CEMENT, NOI | 13 | | | |
| | | ROOFING CEMENT, NOI | 14 | | | |
| | | FELT OR PAPER, BUILDING, ROOFING, OR SHEATHING | 15 | | | |
| | | PAINT, LACQUER OR VARNISH, NOI, LIQUID | 16 | | | |
| | | PAINT/FLAMMABLE LIQUID/UN 1263/PAINT, LACQUER OR VARNISH NOI | 17 | | | |
| | | PAINT RELATED MATERIAL/FLAMMABLE LIQUID/NA 1263/COMPOUND, PAINT OR LACQUER THINNING | 18 | | | |
| | | PAINT, DRY, LUMP OR POWDERED | 19 | | | |
| | | COMPOUND, PAINT THINNING | 20 | | | |
| | | ROOFING, NOIBN, COMPOSITION OR PREPARED | 21 | | | |
| | | RQ HAZARDOUS SUBSTANCE LIQUID NOS | | | | |
| | | ORME-NA-9188 (CREOSOTE) | | | | |

C.O.D. $

☐ TO BE PAID BY SHIPPER ☐ CONSIGNEE

MIT TO

PLACARDED TENDERED OR

RAIL PLACARD-TRUCK

† WEIGHED AT TIPT ST. ROSE, LA. BY

GROSS 45,720

TARE 4,320

ALLENCE 320

~~NET WT.~~ 25,400

RATED SHELL CAPACITY (GALS.)

SHELL OUTAGE

DOME INNAGE

TOTAL

@ °F %

PERMANENT POST OFFICE ADDRESS OF SHIPPER
436 SEVENTH AVENUE PITTSBURGH PA 15219

† FGT. WGT. FACTOR (#/G)

Received $ to apply in prepayment of the charges on the property described hereon

Agent or Cashier

PER

The signature here acknowledges only the amount prepaid

CHARGES ADVANCED $

ubject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to e consignee without recourse on the consignor, the consignor shall sign the following statement. he carrier shall not make delivery of this shipment without payment of freight and all her lawful charges.

Signature of Consignor) KOPPERS COMPANY, INC. per → See ★ below

ote Where the rate is dependent on value, shippers are required to state specifically in writing released or declared value of the property. The agreed or declared value of the property is hereby ied by the shipper to be not exceeding 165 cents per pound for each distribution package."

is is to certify that the above named materials are properly classified, described, packaged rked and labeled and are in proper condition for transportation according to the applicable gulations of the Department of Transportation.

OPPERS COMPANY, INC., Shipper,

† Shipper hereby certifies that this shipment is correctly described, correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

~~[illegible]~~ DART

PER

PER AGENT

★ Signature of Shipper's agent next above is also intended as execution of Section 7. Signature above must appear in longhand.

FOR CHEMICAL EMERGENCIES SPILL, LEAK, FIRE, ...

NOTICE OF SHIPMENT MEMO COPY OF BILL O...

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

**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 required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC
PO BOX [illegible]
KANSAS CITY MO [illegible]

4. Generator's Phone ( [illegible]

5. Transporter 1 Company Name
DART TRUCKING CO. INC.
6. US EPA ID Number
OHD [illegible]

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

9. Designated Facility Name and Site Address
KOPPERS CO INC
TIE PLANT [illegible]
[illegible] ILL
10. US EPA ID Number
[illegible]

A. Missouri Manifest Document Number
0316 [illegible] 0024
B. State Generator's ID
C. MO. Transporter's ID
N-[illegible]
D. Transporter's Phone
E. MO. Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone
618-[illegible]

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. Non-Hazardous Waste Creosote | 1 | BG | 0044746 | P | MO Other |
| b. | | | | | MO Other |
| c. | | | | | MO Other |
| d. | | | | | MO Other |

J. Additional Descriptions for Materials Listed Above
a. RQ Hazardous Substance Liquid or Solid
b. NOS RQ-E
c. NA 9188 Coal Tar Creosote
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
[illegible] Equipment [illegible]
Non-[illegible] -For Trucking [illegible]

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 applicable state regulations.
If I am a large quantity operator, 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 available to me that I can afford.

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

TRANSPORTER

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

GENERATOR

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

December 28, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the three samples collected on December 4, 1987.

Parameter Tested:

| Tank tested | Sample 1 #1 Cylinder | Sample 2 #2 Cylinder | Sample 3 #3 work tank |
|---|---|---|---|
| BTU/pound | 12,551 | 14,930 | 14,272 |
| Arsenic | All Sample results were less than 1 mg/kg | | |
| Boron | All Sample results were less than 10 mg/kg | | |
| Copper | 156 mg/kg | 136 mg/kg | 142 mg/kg |
| Chromium, total | 7.7 mg/kg | 5.1 mg/kg | 8.3 mg/kg |
| Zinc | 334 mg/kg | 325 | 318 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, especially in the area of hazardous waste analysis, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

KOPPERS CO., INC.
TREATED WOOD PROD.
RECEIVED
JAN 4 1988
RECEIVED
KANSAS CITY, MO.

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURC
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD[illegible] Manifest Document No.: [illegible]

2. Page 1 of 1

Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address: KOPPERS CO INC, PO BOX 3037, KANSAS CITY MO 64121

4. Generator's Phone ( )

5. Transporter 1 Company Name: DART TRUCKING CO INC

6. US EPA ID Number: [illegible]

7. Transporter 2 Company Name:

8. US EPA ID Number:

9. Designated Facility Name and Site Address: KOPPERS CO INC, TIE PLANT ROAD (OFF HIGHWAY 51), GRANDNA MISS 35160

10. US EPA ID Number: MSD[illegible]

A. Missouri Manifest Document Number: 0 3 1 6 1 [redacted] 0 0 2 3

B. State Generator's ID - other

C. MO. Transporter's ID: H-1489

D. Transporter's Phone: 1-800-[illegible]

E. MO. Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone: 601-226-4584

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. NON HAZARDOUS PROCESS WASTE CONTAINING USED CREOSOTE | 080 | DM | 40950 | P | MO. / Other |
| b. | | | | | MO. / Other |
| c. | | | | | MO. / Other |
| d. | | | | | MO. / Other |

J. Additional Descriptions for Materials Listed Above

a. RQ HAZARDOUS SUBSTANCE LIQUID (OR SOLID)
b. N.O.S. ORM-E NA 9188
c. (CONTAINS CREOSOTE)
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

WHEN [illegible] PROTECTIVE [illegible] TECTION
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY

18. 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 applicable state regulations.

If I am a large quantity operator, 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 available to me that I can afford.

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

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WALTER JOHNSON | Signature: Walter Johnson | 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: GARY E. McCLELLAND | Signature: Gary E. McClelland | Date: Month / Day / Year

GENERATOR

TRANSPORTER

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

December 28, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the three samples collected on December 4, 1987.

Parameter Tested:

| Tank tested | Sample 1 #1 Cylinder | Sample 2 #2 Cylinder | Sample 3 #3 work tank |
|---|---|---|---|
| BTU/pound | 12,551 | 14,930 | 14,272 |
| Arsenic | All Sample results were less than 1 mg/kg | | |
| Boron | All Sample results were less than 10 mg/kg | | |
| Copper | 156 mg/kg | 136 mg/kg | 142 mg/kg |
| Chromium, total | 7.7 mg/kg | 5.1 mg/kg | 8.3 mg/kg |
| Zinc | 334 mg/kg | 325 | 318 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, especially in the area of hazardous waste analysis, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

KOPPERS CO., INC.
TREATED WOOD PROD.
RECEIVED
JAN 4 1988
RECEIVED
KANSAS CITY, MO.

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.
THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**
Division of Environmental Quality
Waste Management Program
Box 176, Jefferson City, Missouri 65102
314-751-3176

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURC
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## 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 required by State law.

3. Generator's Name and Mailing Address
Koppers Co. Inc.
P.O. Box 8057
Kansas City, Mo. 64129

4. Generator's Phone (816) 841-[illegible]

5. Transporter 1 Company Name
DART TRUCKING CO. INC.

8. US EPA ID Number
[illegible]

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off Highway 51)
Tie Plant Ms. 38960 601-226-4584

10. US EPA ID Number
MSD00[illegible]

A. Missouri Manifest Document Number
[illegible]
B. State Generator's ID - other
C. MO. Transporter's ID H-1759
D. Transporter's Phone [illegible]
E. MO. Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 601-226-4584

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

| | 12. Containers # | Type | 13. Total Quantity | 14. Unit Wt/Vol. | I. Waste No. |
|---|---|---|---|---|---|
| a. Non-Hazardous Process Waste (( Contains used creosote )) | 70 | D | [illegible] | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

J. Additional Descriptions for Materials Listed Above
a. R Q Hazardous Substance, Liquid ( or solid ) N.O.S., ORM-E
b. NA0133 (contains creosote )
c.
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
[illegible] equipment such as impervious gloves, and eye protection
NON-HAZARDOUS WASTE FOR TRACKING PURPOSES ONLY
Alternate TSD Facility: Koppers Co. Inc. 6740 Stadium Dr. Kansas City, Mo. 64129

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 applicable state regulations.
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Printed/Typed Name: JAMES M COLE
Signature: [illegible]
Month Day Year

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

GENERATOR

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

Form 8700-22 (Rev. 9-88) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

December 28, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the three samples collected on December 4, 1987.

Parameter Tested:

| Tank tested | Sample 1 #1 Cylinder | Sample 2 #2 Cylinder | Sample 3 #3 work tank |
|---|---|---|---|
| BTU/pound | 12,551 | 14,930 | 14,272 |
| Arsenic | All Sample results were less than 1 mg/kg | | |
| Boron | All Sample results were less than 10 mg/kg | | |
| Copper | 156 mg/kg | 136 mg/kg | 142 mg/kg |
| Chromium, total | 7.7 mg/kg | 5.1 mg/kg | 8.3 mg/kg |
| Zinc | 334 mg/kg | 325 | 318 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, especially in the area of hazardous waste analysis, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

KOPPERS CO., INC.
TREATED WOOD PROD.
RECEIVED
JAN 4 1988
RECEIVED
KANSAS CITY, MO.

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD007146517 — Manifest Document No.:

2. Page 1 of 1

Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
Koppers Co. Inc.
P.O. Box 8057 Kansas City, Mo. 64129

4. Generator's Phone ( )

A. Missouri Manifest Document Number: 0 3 1 6 1 [redacted] 0 0 2 1

B. State Generator's ID - other

5. Transporter 1 Company Name: Dart Trucking Co. Inc.
8. US EPA ID Number: DMD00286572

C. MO. Transporter's ID: H-1459

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

D. Transporter's Phone: 1-800-234-[illegible]

E. MO. Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off Highway 51)
Grenada, MS. 38960

10. US EPA ID Number: MSD007027548

G. State Facility's ID

H. Facility's Phone: 601-226-4584

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

| | 12. Containers # | Type | 13. Total Quantity | 14. Unit Wt/Vol. | I. Waste No. |
|---|---|---|---|---|---|
| a. Non-Hazardous Process Waste (Contains used creosote) | 80 | DM | 43950 ~~44[illegible]~~ | 2EM P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

J. Additional Descriptions for Materials Listed Above (Liquid) Part C.

a. R.Q. HAZARDOUS SUBSTANCE (OR SOLID) N.O.S.
b. ORM-E NA 9188 (CONTAINS CREOSOTE)
c.
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves, and eye protection. Alternate TSD facility: Koppers Co. Inc. 6740 Stadium Dr. Kansas City, Mo.

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 applicable state regulations. If I am a large quantity operator, 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 available to me that I can afford.

Printed/Typed Name: JAMES M. COLE — Signature: James M. Cole — Month Day Year: 0 2 1

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D. Kenny — Signature: Timothy D. Kenny — Date: Month Day Year: 0 2 1 8

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Date: Month Day Year: 0 9 2 1 8

GENERATOR — TRANSPORTER — FACILITY

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

December 28, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the three samples collected on December 4, 1987.

Parameter Tested:

| Tank tested | Sample 1 #1 Cylinder | Sample 2 #2 Cylinder | Sample 3 #3 work tank |
|---|---|---|---|
| BTU/pound | 12,551 | 14,930 | 14,272 |
| Arsenic | All Sample results were less than 1 mg/kg | | |
| Boron | All Sample results were less than 10 mg/kg | | |
| Copper | 156 mg/kg | 136 mg/kg | 142 mg/kg |
| Chromium, total | 7.7 mg/kg | 5.1 mg/kg | 8.3 mg/kg |
| Zinc | 334 mg/kg | 325 | 318 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, especially in the area of hazardous waste analysis, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

KOPPERS CO., INC.
TREATED WOOD PROD.
RECEIVED
JAN 4 1988
RECEIVED
KANSAS CITY, MO.

Please print or type. (Form designed for use on elite (12 [illegible] writer.)

# UNIFORM HAZARDOUS WASTE MANIFEST

[illegible] Approved. OMB No. 2000-0404. Expires 7-31-86

1. Generator's US EPA ID No. KYD006383392

Manifest Document No. 002 8 88

2. Page 1 of [illegible]

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

3. Generator's Name and Mailing Address
Koppers Co
PO Box 8, Meriweather Rd. Guthrie, Ky 42234

4. Generator's Phone ( 502 ) 483 2541

5. Transporter 1 Company Name
Dart Trucking Co Inc.

6. US EPA ID Number
OHD009865825

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Koppers Co Inc
Box 160 Tie Plant Road
Tie Plant, Ms. 38960

10. US EPA ID Number
MSD007027543

A. State Manifest Document Number
002 8 88

B. State Generator's ID
KYD006383392

C. State Transporter's ID
OHD009865825

D. Transporter's Phone
1 800 238 8357

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID
MSD007027543

H. Facility's Phone
1 601 226 4584

GENERATOR

| | HM | 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. | | Non Hazardous process waste containing used creosote | 51 | DM | 31050 | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
R Q Hazardous Substance, Liquid(of solid) NOS ORM-E
NA 9188
(contains Creosote)

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves & eye protection. NON-HAZARDOUS WASTE-FOR TRACKING PURPOSES ONLY

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.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, 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 method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: Robert Morgan
Signature: [signature]
Month Day Year: 08 15 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Coffey
Signature: [signature]
Month Day Year: 08 15 88

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: GARY E. MCCLELLAND
Signature: [signature]
Month Day Year: 09 16 [illegible]

Style F15R-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete.

SPECTRIX MONROEVILLE

TABLE 1: SUMMARY OF ANALYTICAL DATA

PRODUCED ON 12/10/87 AT 15:02 PAGE

| SAMPLE # | RSLT. LNE | | SOURCE |
|---|---|---|---|
| GROSS HEAT OF COMBUSTION | | | |
| 87110583 | BTU/lb..... | : 5620 | SLUDGE |
| ARSENIC | | | |
| 87110583 | Arsenic, ug/Kg..... | : <47500 | SLUDGE |
| BORON | | | |
| 87110583 | Boron, ug/Kg..... | : 57000 | SLUDGE |
| CHROMIUM | | | |
| 87110583 | Chromium, ug/Kg..... | : 39900 | SLUDGE |
| COPPER | | | |
| 87110583 | Copper, ug/Kg..... | : 10800 | SLUDGE |
| ZINC | | | |
| 87110583 | Zinc, ug/Kg..... | : 48900 | SLUDGE |

The above BTU results are on an as received basis.
The above metal results are on a dry weight basis.

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. MOD007146517 — Manifest Document No.

2. Page ____ of ____

Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC
PO BOX 8057
KANSAS CITY MO 64129

4. Generator's Phone (816) 861 5880

A. Missouri Manifest Document Number 031[redacted]0027

B. State Generator's ID

5. Transporter 1 Company Name
J C TRUCKING INC

6. US EPA ID Number CODO069510 6

C. MO. Transporter's ID

D. Transporter's Phone 1-800-422-4285

7. Transporter 2 Company Name

8. US EPA ID Number

E. MO. Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
KOPPERS CO INC
TIE PLANT ROAD
GRENADA MS 38960

10. US EPA ID Number MSD007027543

G. State Facility's ID

H. Facility's Phone 601-226-4584

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. NON-HAZARDOUS PROCESS WASTE CONTAINING USED CREOSOTE | 28 | DM | 1800 | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

Office 28 at $66.00

J. Additional Descriptions for Materials Listed Above

a. RQ HAZARDOUS SUBSTANCE LIQUID OR SOLIDE
b. N.O.S ORM-E NA 9188
c.
d. CONTAINS CREOSOTE

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WHEN HANDLING WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION
NON-HAZARDOUS WASTE FOR TRACKING PURPOSES ONLY

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 applicable state regulations.
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GENERATOR

Printed/Typed Name: JAMES M. COLE — Signature: James M. Cole — Month Day Year: 12 22 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MANNEY WULFF — Signature: Manney Wulff — Date: Month Day Year 12 22 88

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Date: Month Day Year 12 22 88

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.
THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

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U.S. COAST GUARD
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DEPT. OF NATURAL RESOURCES
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. MDD007145171 — Manifest Document No.
2. Page ___ of ___
Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC
PO BOX 8057
KANSAS CITY MO 64129
4. Generator's Phone ( 816 ) 861 5500

A. Missouri Manifest Document Number: 0 2 1 4 1 [redacted] 0 0 2 7
B. State Generator's ID "Other"
C. MO. Transporter's ID
D. Transporter's Phone
E. MO. Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 601-224-4584

5. Transporter 1 Company Name: J C TRUCKING INC — 6. US EPA ID Number: MDD006851000
7. Transporter 2 Company Name — 8. US EPA ID Number
9. Designated Facility Name and Site Address: KOPPERS CO INC, TIE PLANT ROAD, GRENADA MS 38960 — 10. US EPA ID Number: MDD007027543

| 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. NON-HAZARDOUS PROCESS WASTE CONTAINING USED CREOSOTE | 28 | DM | 18000 | P | MO: Other: |
| b. | | | | | MO: Other: |
| c. | | | | | MO: Other: |
| d. | | | | | MO: Other: |

J. Additional Descriptions for Materials Listed Above
a. RQ HAZARDOUS SUBSTANCE LIQUID OR SOLIDS
b. N.O.S. ORM-E NA 9188
c.
d. CONTAINS CREOSOTE

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WHEN HANDLING WASTE WEAR PROTECTIVE EQUIPMENT [illegible]
NON-HAZARDOUS WASTE FOR TRACKING PURPOSES ONLY

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 applicable state regulations.
If I am a large quantity operator, 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 available to me that I can afford.

Printed/Typed Name: JAMES M. COLE — Signature: [signature] — Month Day Year: 1 2 2 2

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MANNEY WOLFF — Signature: [signature] — Date Month Day Year: 1 2 2 2

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: GARY E. MCCLELLAND — Signature: [signature] — Date Month Day Year: 1 2 2 2

GENERATOR
TRANSPORTER
FACILITY

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

November 12, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the two samples collected on October 30, 1987.

Parameter Tested:

| | | |
|---|---|---|
| Tank tested | Sample 4<br># 6 tank | Sample 5<br># 7 tank |
| BTU/pound | 13,903 | 14, 877 |
| Arsenic | All Sample results were less than 1 mg/kg | |
| Boron | All Sample results were less than 10 mg/kg | |
| Chromium, total | 2.6 mg/kg | 1.1 mg/kg |
| Copper | 65.2 mg/kg | 9.1 mg/kg |
| Zinc | 224.0 mg/kg | 54.2 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

# HAZARDOUS WASTE MANIFEST

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

**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 required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC
PO BOX 8057
KANSAS CITY MO 64129

4. Generator's Phone ( 816) 861-5500

5. Transporter 1 Company Name: DART TRUCKING CO INC.
6. US EPA ID Number: MDD981626937

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

9. Designated Facility Name and Site Address
KOPPERS CO INC.
TIE PLANT ROAD
GRENADA MS. 38960
10. US EPA ID Number: MSD007027543

A. Missouri Manifest Document Number: 0 3 1 4 [redacted] 0 9 2 6
B. State Generator's ID
C. MO. Transporter's ID: 3 1 4 7 3
D. Transporter's Phone: (816) 836 2553
E. MO. Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: (601) 226-4584

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. NON HAZARDOUS PROCESS WASTE CONTAINS USED CREOSOTE | 08 | DM | 00330 | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

J. Additional Descriptions for Materials Listed Above
a. RQ HAZARDOUS SUBSTANCE LIQUID OR SOLID
b. NAS ORM-E
c. NA 9188 CONTAINS CREOSOTE
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WHEN HANDLING [illegible]
NON-HAZARDOUS WASTE - FOR TRUCKING PURPOSES ONLY

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 applicable state regulations.
If I am a large quantity operator, 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 available to me that I can afford.

Printed/Typed Name: JAMES M. COLE | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D Kline | 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: GARY E. MCCLELLAND | Signature | Date Month Day Year

GENERATOR

TRANSPORTER

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

November 12, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the two samples collected on October 30, 1987.

Parameter Tested:

| | | |
|---|---|---|
| Tank tested | Sample 4<br># 6 tank | Sample 5<br># 7 tank |
| BTU/pound | 13,903 | 14, 877 |
| Arsenic | All Sample results were less than 1 mg/kg | |
| Boron | All Sample results were less than 10 mg/kg | |
| Chromium, total | 2.6 mg/kg | 1.1 mg/kg |
| Copper | 65.2 mg/kg | 9.1 mg/kg |
| Zinc | 224.0 mg/kg | 54.2 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.
THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD007146517
Manifest Document No.: 0 00 08
2. Page 1 of 1
Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
Koppers Co. INC.
P.O. Box 8057
Kansas CITY, Mo. 64129
4. Generator's Phone: 816 861-5880

A. Missouri Manifest Document Number: 0 3 1 6 [redacted] 0 0 2 5
B. State Generator's ID - other:
C. MO. Transporter's ID: H-1453
D. Transporter's Phone: 1-800-238-8357
E. MO. Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: 601-226-4524

5. Transporter 1 Company Name: Dart Trucking Co. Inc.
6. US EPA ID Number: 0 HDD0 99 8 65 82 5
7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off highway 150)
Grandna Miss. 38960
10. US EPA ID Number: MSD007027543

| 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. NON Hazardous Process Waste Containihg used Creosote | 83 | 00 | 43380 (EST weight) | P | MO. / Other |
| b. | | | | | MO. / Other |
| c. | | | | | MO. / Other |
| d. | | | | | MO. / Other |

J. Additional Descriptions for Materials Listed Above
a. RQ Hazardous Substance Liquid (or Solids)
b. N. O.S. ORM-E NA 9188
c. (contains Creosote)
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling wear protective equipment such as impervious gloves and eye protection ~~such as~~
NON-Hazardous Waste For Tracking Purposes Only

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 applicable state regulations.
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Printed/Typed Name: JAMES M. COLE
Signature: James M. Cole
Month Day Year: 11 08 87

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D. Kuhn
Signature: [illegible]
Date: Month Day Year: 11 08 87

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

GENERATOR
TRANSPORTER
FACILITY

TSDF FINAL COPY — PART 4

THIS COPY IS TO BE RETAINED BY THE DESIGNATED FACILITY.

EPA Form 8700-22 (Rev. 9-88) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

BLUE VALLEY LABORATORIES
P.O. Box 1265
Mission, Kansas 66222
Telephone (913) 362-1313

November 12, 1987

Mr. Ron Murphy
Koppers Co, Inc.
6740 Stadium Drive
Kansas City, Missouri
64129

Subject: Tank Sludge testing

Dear Mr. Murphy:

The following are the test results for the two samples collected on October 30, 1987.

Parameter Tested:

| | | |
|---|---|---|
| Tank tested | Sample 4<br># 6 tank | Sample 5<br># 7 tank |
| BTU/pound | 13,903 | 14, 877 |
| Arsenic | All Sample results were less than 1 mg/kg | |
| Boron | All Sample results were less than 10 mg/kg | |
| Chromium, total | 2.6 mg/kg | 1.1 mg/kg |
| Copper | 65.2 mg/kg | 9.1 mg/kg |
| Zinc | 224.0 mg/kg | 54.2 mg/kg |

Should you have any questions, please feel free to call us at any time. Thank you for the opportunity to assist you in your testing needs. If you should need additional analytical services, we would appreciate the opportunity to provide assistance.

Yours very truly,
BLUE VALLEY LABORATORIES

Waymon E. Hofheins

Waymon E. Hofheins

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C O D 007077175
Manifest Document No. 880809A
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Koppers Co., Inc., 465 W. 56th Ave., Denver, CO80216

4. Generator's Phone ( 303 ) 295-2826

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

5. Transporter 1 Company Name
J. C. Trucking, Inc.
6. US EPA ID Number COD000695106
C. State Transporter's ID
D. Transporter's Phone

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
H. Facility's Phone

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. R.Q. Hazardous Substance, ~~Liquid~~ Solid N.O.S. ORM-E, NA 9188 (contains creosote) | | 46 | DM | ≈23,000 | P | |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

Effie $ 46 at 46.00

J. Additional Descriptions for Materials Listed Above
When handling, wear protective equipment such as impervious gloves and eye protection. NON-HAZARDOUS WASTE (EXCEPT IN COLORADO) - FOR TRACKING PURPOSES, ONLY.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Although the material described above is classified as a hazardous waste in Colorado, it is not a hazardous waste pursuant to federal or Mississippi laws and regulations. Therefore, the destination to which the material is being shipped, Grenada, Mississippi, is not required to be a permitted hazardous waste treatment, storage or disposal facility. The material will be burned in an industrial boiler in Grenada, Mississippi for energy recovery.

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.

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: F. L. Brown
Signature: F L Brown
Month 12 Day 19 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Manny Wulff
Signature: Manny Wulff
Month 12 Day 19 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month 12 Day 22 Year 88

GENERATOR

ORIGINAL-RETURN TO GENERATOR

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.
THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD007146517 — Manifest Document No.: 00009
2. Page 1 of 1 — Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address: Koppers Co Inc. PO Box 8057 Kansas City MO 64129
4. Generator's Phone (816) 861-5880
A. Missouri Manifest Document Number: 03161 [redacted] 0026
B. State Generator's ID - other:
5. Transporter 1 Company Name: Dart Trucking Co Inc.
6. US EPA ID Number: OHD009865825
C. MO. Transporter's ID: H-1459
D. Transporter's Phone: 1-800 238 8357
7. Transporter 2 Company Name:
8. US EPA ID Number:
E. MO. Transporter's ID:
F. Transporter's Phone:
9. Designated Facility Name and Site Address: Koppers Co Inc. Tie Plant Road Grenada, MS. 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: (601) 226-4584

| 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. Non Hazardous Process Waste Contains used Creosote | 085 | DM | 40730 | P | MO. / Other |
| b. | | | | | MO. / Other |
| c. | | | | | MO. / Other |
| d. | | | | | MO. / Other |

Effie - $ 85 at 66.00

J. Additional Descriptions for Materials Listed Above
a. RQ Hazardous Substance Liquide or Solid.
b. NOS. ORM-E
c. NA 9188 Contains Creosote
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling were protective equipment such as impervious gloves + eye protection
Non-Hazardous Waste - For Tracking Purposes Only

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 applicable state regulations.
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Printed/Typed Name: James M. Cole — Signature: James M. Cole — Month Day Year: 12 19 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D. Klaus. — Signature: Timothy D. Klaus — Date: 12 19 88

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: Gary E. McClelland — Signature: Gary E. McClelland — Date: 12 20 88

GENERATOR — TRANSPORTER — FACILITY

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
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CHEM TREC
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DEPT. OF NATURAL RESOURCE
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD007146517
Manifest Document No.: 0 0 0 8
2. Page 1 of 1
Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
Koppers Co. INC.
P.O. Box 8057
Kansas CITY Mo. 64129

4. Generator's Phone ( ) 816 861-5880

A. Missouri Manifest Document Number: 0 3 1 6 [redacted] 0 0 2 5
B. State Generator's ID
C. MO. Transporter's ID: H-1459
D. Transporter's Phone: 1-800-258-8357
E. MO. Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 601-226-4584

5. Transporter 1 Company Name: Dart Trucking Co. Inc.
6. US EPA ID Number: HDD009818652
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off highway 150)
Grandna Miss. 38960
10. US EPA ID Number: MSD007027543

| 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. NON Hazardous Process Waste Containing used Creosote | 83 | DM | 43380 (EST WEIGHT) | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

Office $60.00 12/28

J. Additional Descriptions for Materials Listed Above
a. ~~RQ Hazardous Substance Liquid (or Solide)~~
b. ~~N. O.S. ORM-E NA 9188~~
c. ~~(contains Creosote)~~
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling wear protective equipment such as impervious gloves and eye protection ~~[illegible]~~
NON-Hazardous Waste For Tracking Purposes Only

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Printed/Typed Name: JAMES M. COLE
Signature: James M. Cole
Month Day Year: 12 08 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D. Kraus
Signature: Timothy D. Kraus
Month Day Year: 12 08 88

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: MONROE HARPER
Signature: Monroe Harper
Month Day Year: 12 13 88

MISSOURI DNR FINAL COPY — PART 1

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EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

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**MISSOURI DEPARTMENT OF NATURAL RESOURCES**
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
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# HAZARDOUS WASTE MANIFEST

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Form Approved. OMB No. 2050-0039, Expires 9-30-88

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. MOD007114 Manifest Document No. 00007

2. Page 1 of 1

Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC.
PO BOX 8557
KANSAS CITY MO 64129

4. Generator's Phone (816) 861-5880

A. Missouri Manifest Document Number 031161 [redacted] 0024

B. State Generator's ID - other

5. Transporter 1 Company Name: DART TRUCKING CO INC

6. US EPA ID Number: OHD009865825

C. MO. Transporter's ID: H-1959

D. Transporter's Phone: 1-800-238-8357

7. Transporter 2 Company Name

8. US EPA ID Number

E. MO. Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
KOPPERS CO INC
TIE PLANT ROAD (OFF HIGHWAY 150)
GRENADA, MS. 38960

10. US EPA ID Number: MSD007027543

G. State Facility's ID

H. Facility's Phone: 601-226-4584

| 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. NON-HAZARDOUS PROCESS WASTE CONTAINS USED CREOSOTE | 86 | DM | 44740 | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

Effie 12/28 $60.00

J. Additional Descriptions for Materials Listed Above

a. RQ HAZARDOUS SUBSTANCE LIQUID OR SOLID
b. N.O.S. ORM-E
c. NA 9188 CONTAINS CREOSOTE
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WHEN HANDLING WEAR PROTECTIVE EQUIPMENT SUCH A IMPERVIOUS GLOVES + EYE PROTECTION
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY

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 applicable state regulations.

If I am a large quantity operator, 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 available to me that I can afford.

GENERATOR — Printed/Typed Name: JAMES M. COLE — Signature: James M. Cole — Month Day Year: 11 11 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Date

Printed/Typed Name: BOB R COFFEY — Signature: Bob R Coffey — Month Day Year: 11 11 88

18. Transporter 2 Acknowledgement of Receipt of Materials — Date

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. — Date

Printed/Typed Name: MONROE HARPER — Signature: Monroe Harper — Month Day Year: 11 11 88

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P. O. Box 2063
Harrisburg, PA 17120

Form approved
OMB No. 2050 0039
Expires 9-30-88

ER SWM-51-REV 6/87

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

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: P.A.D.0.5.6.7.2.3.2.6.5
Manifest Document No.: 1.00.0.0
2. Page 1 of 1
Information in the shaded areas is not required by Federal law but is required by State law.

3. Generator's Name and Mailing Address
Koppers Co., Inc., P.O. Box 189, Montgomery, Pa. 17752

4. Generator's Phone ( 717 ) 547-1651

A. State Manifest Document Number: PAB 5438370
B. State Gen. ID: PAD 056723265

5. Transporter 1 Company Name: Dart Trucking Co., Inc.
6. US EPA ID Number: O.H.D.0.0.9.8.6.5.8.2.5
C. State Trans. ID: PA-AH 0.2.1.9

7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone ( 800 ) 238-8357
E. State Trans. ID: PA-AH

9. Designated Facility Name and Site Address
Koppers Co., Inc., P.O. Box 160
Grenada, MS 38960
10. US EPA ID Number: M.S.D.0.0.7.0.2.7.5.4.3
F. Transporter's Phone ( )
G. State Facility's ID: Not Required
H. Facility's Phone ( )

| 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. N RQ-Non Hazardous Process Waste N.O.S. Liquid ORM-E NA 9188 (Contains Used Creosote) | 69 | DM | 4140 | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

Complete 12-7-88
69 Drums @ $60.00

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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 |
|---|---|---|---|---|
| T. D. LOADMAN | T. D. Loadman | 11 | 16 | 88 |

17. Transporter 1 Acknowledgement of Receipt of Materials

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Larry Allender | Larry Allender | 11 | 16 | 88 |

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 |
|---|---|---|---|---|
| MONROE HANKER | Monroe Hanker | 11 | 17 | 88 |

GENERATOR
TRANSPORTER
FACILITY

PAB 5438370

PA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

Copy 6 - TSD Facility: Retain This Copy

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.

THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. MOD007146517 — Manifest Document No. 000016

2. Page 1 of 1 — Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
KOPPERS CO INC.
PO BOX 8057
KANSAS CITY MO. 64129

4. Generator's Phone ( )

A. Missouri Manifest Document Number 03161[redacted]0023

B. State Generator's ID - other

C. MO. Transporter's ID H-1459

D. Transporter's Phone 1-800-238-8257

E. MO. Transporter's ID

F. Transporter's Phone

5. Transporter 1 Company Name: DART TRUCKING CO INC.

6. US EPA ID Number: ND009865825

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
KOPPERS CO INC.
TIE PLANT ROAD (OFF Highway 51)
GRANDNA MISS 38960

10. US EPA ID Number: MSD007027543

G. State Facility's ID

H. Facility's Phone 601-226-4584

| 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. NON HAZARDOUS PROCESS WASTE CONTAINING USED CREOSOTE | 080 | DM | 40950 | P | MO. Other |
| b. | | | | | MO. Other |
| c. | | | | | MO. Other |
| d. | | | | | MO. Other |

Ethie 12/28
$ 60.00

J. Additional Descriptions for Materials Listed Above

a. RQ HAZARDOUS SUBSTANCE Liquid (OR Solid)
b. N.O.S. ORM-E NA 9188
c. (CONTAINS CREOSOTE)
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WHEN HANDING WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY

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 applicable state regulations.

If I am a large quantity operator, 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 available to me that I can afford.

GENERATOR — Printed/Typed Name: JAMES M. COLE — Signature: James M. Cole — Month Day Year: 11 09 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Date

Printed/Typed Name: WALTER JOHNSON — Signature: Walter Johnson — Month Day Year: 11 09 88

18. Transporter 2 Acknowledgement of Receipt of Materials — Date

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. — Date

Printed/Typed Name: GARY E. McCLELLAND — Signature: Gary E. McClelland — Month Day Year: 11 11 88

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

INSTRUCTIONS FOR THE COMPLETION OF THIS FORM ARE ON A SEPARATE SHEET.
THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCES
314 634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's EPA ID No.: M0000214651 7 Manifest Document No.: 00005
2. Page 1 of 1
Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
Koppers Co. Inc.
P.O. Box 8057
Kansas City, Mo. 64129
4. Generator's Phone (816) 861-5880

A. Missouri Manifest Document Number: 03 16 1 [redacted] 00 22
B. State Generator's ID - other:

5. Transporter 1 Company Name: DART TRUCKING CO. INC.
6. US EPA ID Number: OHD009865825
C. MO. Transporter's ID: H-1459
D. Transporter's Phone: 1-800 238-8351

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

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off Highway 51)
Tie Plant, Ms. 38960 601-226-4584
Grenada, MS, Emc
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: 601-226-4584

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

| | 12. Containers # | Type | 13. Total Quantity | 14. Unit Wt/Vol. | I. Waste No. |
|---|---|---|---|---|---|
| a. Non-Hazardous Process Waste (( Contains uaed creosote ) | 70 | DM | 34040 | P | MO. / Other |
| b. | | | | | MO. / Other |
| c. | | | | | MO. / Other |
| d. | | | | | MO. / Other |

Effic 12/28
60.00

J. Additional Descriptions for Materials Listed Above
a. R Q Hazardous Substance, Liquid ( or solid ) N O.S., ORM-E
b. NA9188 (contains creosote )
c.
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equiptment such as impervious gloves, and eye protection
NON-HAZARDOUS WASTE-FOR TRACKING PURPOSES ONLY
Alternate TSD facility: Koppers Co. Inc. 6740 Stadium Dr. Kansas City, Mo. 64129

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 applicable state regulations.
If I am a large quantity operator, 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 available to me that I can afford.

Printed/Typed Name: JAMES M COLE
Signature: James M. Cole
Month Day Year: 09 01 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Elizabeth McFarland
Signature: Elizabeth McFarland
Date: 09 01 88

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: MONROE HARPER
Signature: Monroe Harper
Date: 09 02 88

GENERATOR
TRANSPORTER
FACILITY

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

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THIS DOCUMENT MUST BE USED FOR ALL MISSOURI-DESTINED SHIPMENTS.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality
Waste Management Program
P.O. Box 176 Jefferson City, Missouri 65102
314-751-3176

# HAZARDOUS WASTE MANIFEST

EMERGENCY RESPONSE
U.S. COAST GUARD
1-800-424-8802
CHEM TREC
1-800-424-9300
DEPT. OF NATURAL RESOURCE
314-634-2436

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

Form Approved. OMB No. 2050-0039, Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MOD007146517 — Manifest Document No.: 00004

2. Page 1 of 1

Information in the shaded areas is required by State law.

3. Generator's Name and Mailing Address
Koppers Co. Inc.
P.O. Box 8057 Kansas City, Mo. 64129

4. Generator's Phone ( )

A. Missouri Manifest Document Number: 03161 [redacted] 0021

B. State Generator's ID - other

5. Transporter 1 Company Name: DART TRUCKING CO. INC

6. US EPA ID Number: OHD009865825

C. MO. Transporter's ID: H-1459

D. Transporter's Phone: 1-800-238-8357

7. Transporter 2 Company Name

8. US EPA ID Number

E. MO. Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Koppers Co. Inc.
Tie Plant Road (off Highway 51)
Grenada, MS. 38960

10. US EPA ID Number: MSD007027543

G. State Facility's ID

H. Facility's Phone: 601-226-4584

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers # | Type | 13. Total Quantity | 14. Unit Wt/Vol. | I. Waste No. |
|---|---|---|---|---|---|
| a. Non-Hazardous Process Waste (Contains used creosote) | 80 | DM | 43950 ~~44990~~ | PEM P | MO. / Other |
| b. | | | | | MO. / Other |
| c. | | | | | MO. / Other |
| d. | | | | | MO. / Other |

Give to Effie 11-1-88 80-at $50.00

J. Additional Descriptions for Materials Listed Above
a. R.Q HAZARDOUS SUBSTANCE (LIQUID) (OR SOLID) N.O.S.
b. ORM-E NA 9188 (CONTAINS CREOSOTE)
c.
d.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equiptment such as impervious gloves, and eye protection. Alternate TSD facility: Koppers Co. Inc. 6740 Stadium Dr. Kansas City, Mo.

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 applicable state regulations.
If I am a large quantity operator, 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 available to me that I can afford.

Printed/Typed Name: JAMES M. COLE — Signature: James M. Cole — Month Day Year: 08 25 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy D. Klaus — Signature: Timothy D. Klaus — Date: 08 25 88

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Date: 08 29 88

GENERATOR — TRANSPORTER — FACILITY

MISSOURI DNR FINAL COPY — PART 1

THIS COPY MUST BE SENT BACK TO THE GENERATOR BY THE DESIGNATED FACILITY THEN TRANSMITTED TO THE DEPARTMENT BY THE GENERATOR.

EPA Form 8700-22 (Rev. 9-86) MDNR-HWG 10 PREVIOUS EDITIONS ARE OBSOLETE

# South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)734-5424

PLEASE PRINT or TYPE (Form designed for use on elite (12-pitch) typewriter)

Form Approved. OMB No. 2050-0039 Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. 5 C D 0 0 3 3 6 3 0 2 6 0 0 1 8 2
Manifest Document No.
2. Page 1 of

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

3. Generator's Name and Mailing Address Koppers Company, Inc.
P.O. Box 1725
Florence, S.C. 29503

A. State Manifest Document Number

4. Generator's Phone (803) 669-8231

B. State Generator's ID

5. Transporter 1 Company Name: Koppers Company, Inc.
6. U.S. EPA ID Number: P A D 0 1 6 6 1 7 2 3 2 6 5

C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. U.S. EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Koppers Co, Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960 601-226-4584
10. U.S. EPA ID Number: M S D 0 0 7 0 2 7 5 4 3

G. State Facility's ID
H. Facility's Phone

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | K. Handling Codes for Wastes Listed Above |
|---|---|---|---|---|---|
| a. Nonhazardous process waste containing used creosote | 0 2 7 | D M | 1 5 6 6 0 | | |
| b. Nonhazardous process waste containing used Pentachlorophenol | 0 4 8 | D M | 3 0 2 6 0 | | |
| c. 27 @ $50.00 gave to Effie | 75 | | | | |
| d. 48 @ $75.00 8-30-88 | | | | | |

J. Additional Descriptions for Materials Listed Above
a. R.Q. Hazardous substance, Liquid (or solid), N.O.S., ORM-E
NA 9188
b.
c.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves and eye protection.
NON-HAZARDOUS WASTE-FOR TRACKING PURPOSES ONLY.

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 the laws of the State of South Carolina.

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 |
|---|---|---|
| Timothy Richardson | Timothy Richardson | 10 12 3 8 8 |

17. Transporter 1 Acknowledgement of Receipt of Materials

| Printed/Typed Name | Signature | Month Day Year |
|---|---|---|
| C.W. CHOATE | C.W. Choate | 10 12 3 8 8 |

18. Transporter 2 Acknowledgement of Receipt of Materials

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

19. Discrepancy Indication Space

a ____ lbs. c ____ lbs.
b ____ lbs. d ____ lbs.

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 |
|---|---|---|
| GARY E. MCCLELLAND | Gary E. McClelland | 10 12 4 8 8 |

Please print or type. (Form designed for use on elite (1[illegible] typewriter.) Approved OMB No. 2000-0404. Expires 7-31-86

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KYD006383392
Manifest Document No. 002 8 88
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Koppers Co
PO Box 8, Meriweather Rd. Guthrie, Ky 42234
4. Generator's Phone ( 502 ) 483 2541

A. State Manifest Document Number 002 8 88
B. State Generator's ID KYD006383392

5. Transporter 1 Company Name
Dart Trucking Co Inc, bm
6. US EPA ID Number OHD009865825
C. State Transporter's ID OHD009865825
D. Transporter's Phone 1 800 238 8357

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
Koppers Co Inc
Box 160 Tie Plant Road
Tie Plant, Ms. 38960
10. US EPA ID Number MSD007027543
G. State Facility's ID MSD007027543
H. Facility's Phone 1 601 226 4584

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. | Non Hazardous process waste containing ~~used creosote~~ | | 51 | DM | 31050 | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
R Q Hazardous Substance, Liquid(of solid) NOS ORM-E
NA 9188
(Contains Creosote)

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves & eye protection. NON-HAZARDOUS WASTE-FOR TRACKING PURPOSES ONLY

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.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, 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 method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: Robert Morgan
Signature: Robert Morgan
Month 08 Day 15 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Coffey
Signature: Bob Coffey
Month 08 Day 15 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month 08 Day 16 Year 88

Style F15R-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete.

ORIGINAL RETURN TO GENERATOR

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. COD007077175
Manifest Document No. 880809
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Koppers Company, Inc.
465 West 56th Avenue
Denver, CO 80216

4. Generator's Phone ( 303 ) 295-2826

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

5. Transporter 1 Company Name
Dart Trucking Company, Inc.
6. US EPA ID Number OHD009865825
C. State Transporter's ID
D. Transporter's Phone 800-238-8357

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
Koppers Company, Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960 (601)226-4584
10. US EPA ID Number MSD007027543
G. State Facility's ID
H. Facility's Phone

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. Nonhazardous process waste containing used Creosote | | 85 | DM | 46,400 ~~40,000#~~ | P | |
| b. New Bldg. - 8-12-88 gave to Effie 11-1-88 | | | | 546 Avg. | | |
| c. Complete 10-31-88 | | | | | | |
| d. 85 Drums @ $50.00 | | | | | | |

J. Additional Descriptions for Materials Listed Above
R. Q. Hazardous Substance, Liquid & Solid, N.O.S.,
ORM-E, NA 9188
(contains creosote)
53 Liquid
32 Solid

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves and eye protection.
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY.

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.
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: F. L. Brown
Signature: F L Brown
Month 03 Day 08 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ed Straight
Dart Trucking Company, Inc.
Signature: Ed Straight
Month 03 Day 08 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month 10 Day 11 Year 88

ORIGINAL - RETURN TO GENERATOR

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P. O. Box 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

1

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

Form Approved. OMB No. 2050-0039. Expires 9-30-88

AR 3-87

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. A R D 0 0 6 3 4 4 8 2 4 Manifest Document No. 6 7 2 1 4

2. Page 1 of 1

Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
Koppers Co. Inc.
P.O. Box 15490
North Little Rock AR. 72231

4. Generator's Phone ( 501 ) 945 4581

A. State Manifest Document Number AR-167214

B. State Generator's ID

5. Transporter 1 Company Name: DART Trucking Co. Inc

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

C. State Transporter's ID: H205 PC 902

D. Transporter's Phone: 1-800-547-9158

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
Koppers Co. Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960

10. US EPA ID Number: M S R 0 0 7 0 2 7 5 4 3

G. State Facility's ID

H. Facility's Phone: 601-226-4584

| 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. Nonhazardous process waste containing used creosote | 0 8 3 | DM [redacted] | 46940 | P | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above
R.Q. Hazardous Substance solid N.O.S.
ORM-E NA 9188 (contains creosote)

K. Handling Codes for Wastes Listed Above

If no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information
When handling wear protective equipment such as impervious gloves, and eye protection
Alternate TSD Facility: Koppers Co. Inc. 2201 Edmonds St. North Little Rock AR. 72117
Non-Hazardous waste - For Tracking Purposes Only

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: Ken Martin
Signature: Ken Martin
Month Day Year: 0 8 0 8 8 8

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Caffey
Signature: Bob Caffey
Month Day Year: 0 8 0 8 8 8

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month Day Year: 0 8 0 9 8 8

EPA Form 8700-22 (Rev. 9-86) 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

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

*Form Approved OMB No. 158-S80004*

**I. EPA I.D. NUMBER**

F M S D 0 0 7 0 2 7 5 4 3

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| YR. | MO. | DAY |
|---|---|---|
| 0 4 | 0 1 | 0 1 |

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.
1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|
| GALLONS | G |
| LITERS | L |
| CUBIC YARDS | Y |
| CUBIC METERS | C |
| GALLONS PER DAY | U |

| UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|
| LITERS PER DAY | V |
| TONS PER HOUR | D |
| METRIC TONS PER HOUR | W |
| GALLONS PER HOUR | E |
| LITERS PER HOUR | H |

| UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|
| ACRE-FEET | A |
| HECTARE-METER | F |
| ACRES | B |
| HECTARES | Q |

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP 1

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|
| X-1 | S 0 2 | 600 | G | |
| X-2 | T 0 3 | 20 | E | |
| 1 | S 0 4 | 130,650 | G | |
| 2 | D 8 0 | 0.73 | A | |
| 3 | | | | |
| 4 | | | | |

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Note: 111.C. Line 1

650 cubic yards x 201 gal/yd$^3$ - 130,650 gallons

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K 0 5 4 | 900 | P | T 0 3 D 8 0 | |
| X-2 | D 0 0 2 | 400 | P | T 0 3 D 8 0 | |
| X-3 | D 0 0 1 | 100 | P | T 0 3 D 8 0 | |
| X-4 | D 0 0 2 | | | | included with above |

Continued from page 2.
*NOTE: Photocopy this page before completing if you have more than 26 wastes to list.*

*Form Approved OMB No. 158-S80004*

| EPA I.D. NUMBER (enter from page 1) | | FOR OFFICIAL USE ONLY |
|---|---|---|
| W M S D 0 0 7 0 2 7 5 4 3 | T/A 1 | W DUP T/A 2 DUP |

## IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | | | | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|---|
| 1 | K001 | 2500 | P | 04 | | | | |
| 2 | K001 | 0 | P | D80 | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |
| 26 | | | | | | | | |



CONTINUE ON REVERSE

Continued from the front.

## IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

Note: IV.B. Line 2

Wastes were last placed on May 13, 1987.

EPA I.D. NO. *(enter from page 1)*

| S | M | S | D | 0 | 0 | 7 | 0 | 2 | 7 | 5 | 4 | 3 | T/N | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 6 |

## V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

## VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

## VII. FACILITY GEOGRAPHIC LOCATION

| LATITUDE *(degrees, minutes, & seconds)* | LONGITUDE *(degrees, minutes, & seconds)* |
|---|---|
| 3 3 4 4 0 4 | 8 9 4 7 1 9 |

## VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. *(area code & no.)* |
|---|---|
| | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| | C G | | |

## IX. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| James Batchelder | | |

## X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

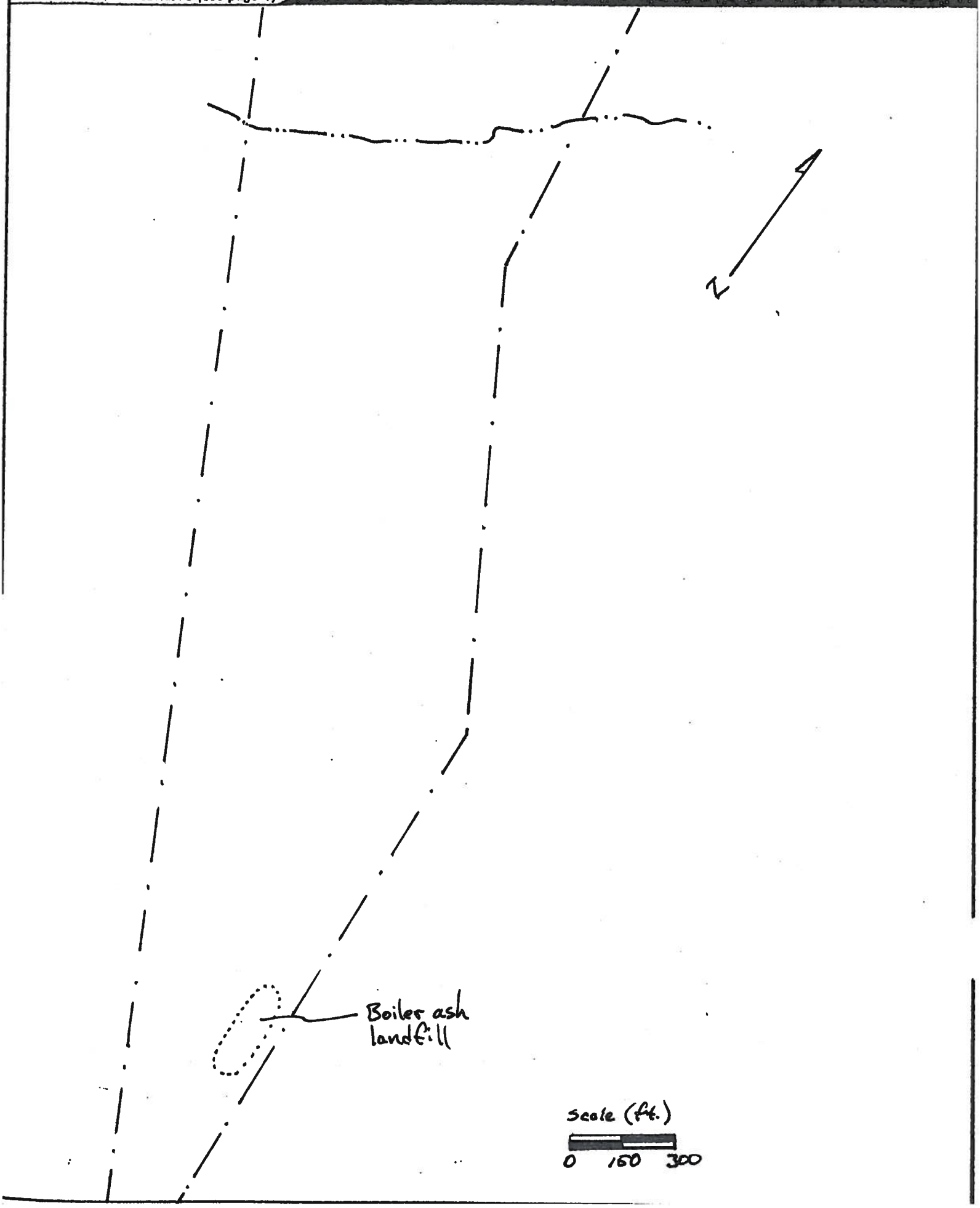
| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| | | |

 CONTINUE ON PAGE 5

Continued from page 4.



V. FACILITY DRAWING *(see page 4)*



ntinued from the front.

. DESCRIPTION OF HAZARDOUS WASTES (ntinued)

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE

Note: IV.B. Line 2

Wastes were last placed on May 13, 1987.

EPA I.D. NO. (enter from page 1)

| M | S | D | 0 | 0 | 7 | 0 | 2 | 7 | 5 | 4 | 3 | | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

. FACILITY DRAWING

ll existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

I. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, reatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

II. FACILITY GEOGRAPHIC LOCATION

| LATITUDE (degrees, minutes, & seconds) | LONGITUDE (degrees, minutes, & seconds) |
|---|---|
| 3 3 4 4 0 4 | 8 9 4 7 1 9 |

III. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. (area code & no.) |
|---|---|
| | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| | C G | | |

X. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME (print or type) | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| James Batchelder | James Batchelder | 8/12/88 |

X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME (print or type) | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| | | |



CONTINUE ON PAGE

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P. O. Box 9583 Little [illegible]kansas 72219
Telephone 501-562-7444

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

Form Approved. OMB No. 2050-0039. Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ARD006344824 — Manifest Document No.: 67213
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address: Koppers Co. Inc. P.O. Box 15490 North Little Rock AR
4. Generator's Phone (501) 945-4581
A. State Manifest Document Number: AR-167213
B. State Generator's ID:
5. Transporter 1 Company Name: DART Trucking Co. Inc.
6. US EPA ID Number: OHD009865825
C. State Transporter's ID: H205 PC 902
D. Transporter's Phone: 1-800-541-9158
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: Koppers Co. Inc. Box 160, Tie Plant Road Tie Plant, MS 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: 601-226-4584

| 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. 2nd Load - NLR Nonhazardous process waste containing | 074 | DM | 40,950 40947 | P | |
| b. Used creosote | | | 553 #s | Avg | |
| c. Complete 8-12-88 74 Drums @ $50.00 | | | | | |
| d. gave to Effie 8-30-88 | | | | | |

J. Additional Descriptions for Materials Listed Above: R.Q Hazardous Substance Solid N.O.S. ORM-E NA9188 (contains creosote)
If no alternate TSDF, return to generator

K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: When handling, wear protective equipment such as impervious gloves and eye protection. Alternate TSDF, Koppers Co, Inc, 2201 Edmonds, No Little Rock, 72117
NON-HAZARDOUS WASTE - FOR Tracking Purposes Only

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: Ken Martin — Signature: Ken Martin — Month Day Year: 07 29 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Paul Lasky — Signature: Paul Lasky — Month Day Year: 07 29 88

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Month Day Year: 07 30 88

GENERATOR — TRANSPORTER — FACILITY

EPA Form 8700-22 (Rev. 9-86) 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 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

3

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

Form Approved. OMB No. 2050-0039. Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. AR1D0016344812461 Manifest Document No. 7121112

2. Page 1 of 1

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

3. Generator's Name and Mailing Address: Koppers Co Inc. PO Box 15490 North Little Rock AR 72231

A. State Manifest Document Number: AR-157212

B. State Generator's ID:

4. Generator's Phone: (501) 945 4581

5. Transporter 1 Company Name: DART TRUCKING CO. INC.

6. US EPA ID Number: OMD009865825

C. State Transporter's ID:

D. Transporter's Phone: 713-341-8155

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: Koppers Co. Inc. Box 160 Tie Plant Road Tie Plant MS 38960

10. US EPA ID Number: MSD007027543

G. State Facility's ID:

H. Facility's Phone: 601-224-4584

| 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. Nonhazardous process waste containing | 075 | DM | 41120 | LBS | |
| b. used creosote. | | | | | |
| c. | | | | | |
| d. | | | | | |

$50.00 Per Drum to Office Since 8/1/88

I. Additional Descriptions for Materials Listed Above: R.Q. HAZARDOUS Substance Solid NOS, ORM-E NA 9188 (contains creosote)

J. Handling Codes for Wastes Listed Above

If an alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information: When [illegible] wear protective clothing such as impervious gloves, and eye protection. Alternate Transporter: Dart Co. Inc. 3001 Edmondson St North Little Rock AR 72117
NON-HAZARDOUS WASTE - FOR TRUCKING PURPOSES ONLY

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: Ken Martin — Signature: Ken Martin — Month Day Year: 10 7 21 88

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Bob Coffey — Signature: Bob Coffey — Month Day Year: 10 7 21 88

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Month Day Year: 10 7 21 88

EPA Form 8700-22 (Rev. 9-85) Previous edition is obsolete.

TREATMENT/STORAGE/DISPOSAL FACILITY COPY

Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite (12 pitch typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD009112087
2. Manifest Document No. 0108 of 1

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

3. Generator's Name and Mailing Address
Koppers Co Inc
PO Box 351 Oroville, California 95965

A. State Manifest Document Number 87057626

4. Generator's Phone (916) 533-6535

5. Transporter 1 Company Name
Dart Trucking Co Inc

6. US EPA ID Number MDD009816582

B. State Transporter's ID 2171

7. Transporter 2 Company Name

8. US EPA ID Number

C. Transporter's Phone 602-926-0896

9. Designated Facility Name and Site Address
Koppers Co Inc
Highway 51 South
Meridian, Mississippi 38960

10. US EPA ID Number MID980702754

D. Facility's Phone 601-422-4584

| 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 Solid NOS ORME NA9189 | 72 | DM | 40000 | P | State / EPA/Other |
| b. 33 - Penta. (72) | | | 555 #'s Avg. | | State / EPA/Other |
| c. Complete 7-27-88 39 - Creo. Price to follow per Demo | | | | | State / EPA/Other |
| d. 72. $100.00 | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above
Material contains benzenehexachloride, oil components wood, dirt + metals - 33 penta, 39 creo
Extremely Hazardous Waste Permit 1-2004 Dated 1-22-88

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information Although the material described abovide is classified as a hazardous waste in California, it is not a hazardous waste pursuant to Federal or Miss. laws & regulations. Therefore the destination to which the material is being shipped, Meridian, Miss. is not required to be a permitted hazardous waste treatment, storage and disposal site. The material will be burned as a industrial fuel.

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: Michael J Calcatera — Signature: Michael J Calcatera — Month Day Year: 07 08 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Elizabeth McFarland — Signature: Elizabeth McFarland — Month Day Year: 07 08 88

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: Norman K. Lindvall — Signature: Norman K. Lindvall — Month Day Year: 07 14 88

GENERATOR — TRANSPORTER — FACILITY

IN EMERGENCY CALL 1-800-852-7550

8022 A (1/87)
5700—22 (9-86) Previous editions are obsolete.

White: TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

INSTRUCTIONS ON THE BACK

**STATE OF ARKANSAS**
**Department of Pollutio[illegible] and Ecology**
**P. O. Box 9583 Little [illegible], Arkansas 72219**
**Telephone 501-562-7444**

3

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

*Form Approved. OMB No. 2050-0039. Expires 9-30-88*

AR 3-87

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: AR D 0 0 6 3 4 4 8 2 4 6 — Manifest Document No.: 7 2 1 2
2. Page 1 of 1

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

3. Generator's Name and Mailing Address: [illegible] Inc. [illegible] 15490 [illegible] Rock AR 72231
4. Generator's Phone (501) 945-581
A. State Manifest Document Number: AR-167212
B. State Generator's ID:
5. Transporter 1 Company Name: DART TRUCKING CO. INC.
6. US EPA ID Number: OHD009865825
C. State Transporter's ID:
D. Transporter's Phone: 1-800-541-9158
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: Koppers Co., Inc. Box 160 Tie Plant Road Tie Plant MS 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: 601-226-4584

| 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. Nonhazardous process waste containing | 075 | DM | 41200 | lbs | |
| b. used creosote. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above: R.Q. HAZARDOUS Substance Solid N.O.S. ORM-E NA 9188 (CONTAINS CREOSOTE)

K. Handling Codes for Wastes Listed Above:

if no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information: [illegible] Alternate [illegible] 2001 [illegible] St. [illegible] Rock AR [illegible]
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY

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: Ken Martin — Signature: Ken Martin — Month Day Year: 07 21 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Coffey — Signature: Bob Coffey — Month Day Year: 07 21 88

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: GARY E. McCLELLAND — Signature: Gary E. McClelland — Month Day Year: 07 22 88

GENERATOR — TRANSPORTER — FACILITY

EPA Form 8700-22 (Rev. 9-86) Previous edition is obsolete.

TREATMENT/STORAGE/DISPOSAL FACILITY COPY

AMERICAN INTERPLEX
CORPORATION
LABORATORIES

3400 Asher Avenue
Little Rock, Arkansas 72204
(501) 664-5060

Koppers Company, Inc. (C-62b)
Post Office Box 15490
North Little Rock, AR 72117

April 19, 1988

ATTN: Mr. Ken Martin

Control No. 15184

Description of Sample: One (1) sludge sample received on 3/29/88
P.O. No. 29907

Results:

| Parameter | Unit | Creosote Process Sludge from Oil & Water Separator |
|---|---|---|
| Heat Content | BTU/lb | 9130 |
| Chromium | ppm | 2.0 |
| Copper | ppm | 5.8 |
| Zinc | ppm | 49 |
| Boron | ppm | 2.3 |
| Arsenic | ppm | 2.6 |

Method: ASTM D240, EPA 3050, 6010

AMERICAN INTERPLEX CORPORATION

By Lydia Norton

Lydia Norton, Lab Director

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P. O. Box 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

3

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

*Form Approved. OMB No. 2050-0039. Expires 9-30-88*

AR 3-87

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ARD006344824 Manifest Document No.: 67213
2. Page 1 of 1

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

3. Generator's Name and Mailing Address: Koppers Co. Inc. PO Box 15490 North Little Rock AR
4. Generator's Phone (501) 945-4581

A. State Manifest Document Number: AR-167213
B. State Generator's ID:

5. Transporter 1 Company Name: DART Trucking Co Inc
6. US EPA ID Number: OHD009865825
C. State Transporter's ID: H205 PC 902
D. Transporter's Phone: 1-800-541-9158

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: Koppers Co. Inc. Box 160 Tie Plant Road Tie Plant MS 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: 601-226-4584

| 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. Nonhazardous process waste containing | 074 | DM | 40947 | P | |
| b. used creosote | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above: R.Q Hazardous Substance Solid N.O.S. ORM-E NA9188 (contains creosote)
if no alternate TSDF, return to generator

K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: When handling, wear protective equipment such as impervious gloves and eye protection. Alternate TSDF, Koppers Co, Inc., 2201 Edmonds, No Little Rock 72117
NON-HAZARDOUS WASTE - FOR Tracking Purposes Only

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: Ken Martin
Signature: Ken Martin
Month Day Year: 07 29 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Paul Lasky
Signature: Paul Lasky
Month Day Year: 07 29 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month Day Year: 07 30 88

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (Rev. 9-86) Previous edition is obsolete.

TREATMENT/STORAGE/DISPOSAL FACILITY COPY

AMERICAN INTERPLEX
CORPORATION
LABORATORIES

3400 Asher Avenue
Little Rock, Arkansas 72204
(501) 664-5060

Koppers Company, Inc. (C-62b)
Post Office Box 15490
North Little Rock, AR 72117

April 19, 1988

ATTN: Mr. Ken Martin

Control No. 15184

Description of Sample: One (1) sludge sample received on 3/29/88
P.O. No. 29907

Results:

| Parameter | Unit | Creosote Process Sludge from Oil & Water Separator |
|---|---|---|
| Heat Content | BTU/lb | 9130 |
| Chromium | ppm | 2.0 |
| Copper | ppm | 5.8 |
| Zinc | ppm | 49 |
| Boron | ppm | 2.3 |
| Arsenic | ppm | 2.6 |

Method: ASTM D240, EPA 3050, 6010

AMERICAN INTERPLEX CORPORATION

By Lydia Norton

Lydia Norton, Lab Director

STATE OF ARKANSAS
Department of Pollution [illegible] and Ecology
P. O. Box 9583 Little R[illegible]ansas 72219
Telephone 501-562-7444

3

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

*Form Approved. OMB No. 2050-0039. Expires 9-30-88*

AR 3-87

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ARD006344824 Manifest Document No. 67214
2. Page 1 of 1

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

3. Generator's Name and Mailing Address: Koppers Co. Inc. P.O. Box 15490
4. Generator's Phone ( 501 ) 945-4381 North Little Rock AR. 72231

A. State Manifest Document Number: AR-167214
B. State Generator's ID:

5. Transporter 1 Company Name: DART Trucking Co. Inc
6. US EPA ID Number: OHD009865825
C. State Transporter's ID: 4205 PC 902
D. Transporter's Phone: 1-800-541-9158

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: Koppers Co. Inc. Box 160 Tie Plant Road Tie Plant MS 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID:
H. Facility's Phone: 601-226-4584

| 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. Nonhazardous process waste containing used creosote | 083 | DM | 46940 | P | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above: R.Q. Hazardous Substance solid N.O.S. ORM-E NA 9188 (contains creosote)

K. Handling Codes for Wastes Listed Above:

if no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information: When handling wear protective equipment such as impervious gloves [illegible] protection. Alternate Tab Facility Koppers Co. Inc. 2201 Edmonds St. North Little Rock AR. 72117 Non-Hazardous waste. For Trading Purposes Only

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: Ken Martin
Signature: Ken Martin
Month Day Year: 08 08 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bob Coffey
Signature: Bob Coffey
Month Day Year: 08 08 88

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: GARY E MCCLELLAND
Signature: Gary E McClelland
Month Day Year: 08 09 88

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (Rev. 9-86) Previous edition is obsolete.

TREATMENT/STORAGE/DISPOSAL FACILITY COPY

AMERICAN INTERPLEX
CORPORATION
LABORATORIES

3400 Asher Avenue
Little Rock, Arkansas 72204
(501) 664-5060

Koppers Company, Inc. (C-62b)
Post Office Box 15490
North Little Rock, AR 72117

April 19, 1988

ATTN: Mr. Ken Martin

Control No. 15184

Description of Sample: One (1) sludge sample received on 3/29/88
P.O. No. 29907

Results:

| Parameter | Unit | Creosote Process Sludge from Oil & Water Separator |
|---|---|---|
| Heat Content | BTU/lb | 9130 |
| Chromium | ppm | 2.0 |
| Copper | ppm | 5.8 |
| Zinc | ppm | 49 |
| Boron | ppm | 2.3 |
| Arsenic | ppm | 2.6 |

Method: ASTM D240, EPA 3050, 6010

AMERICAN INTERPLEX CORPORATION

By Lydia Norton

Lydia Norton, Lab Director

# South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)734-5424

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter)

Form Approved. OMB No. 2050-0039 Expires 9-30-88

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. 5 C D 0 0 3 3 6 3 0 2 6 0 0 1 8 2 — Manifest Document No.
2. Page 1 of

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

3. Generator's Name and Mailing Address: Koppers Company, Inc. P.O. Box 1725 Florence, S.C. 29503

4. Generator's Phone (803) 669-8231

5. Transporter 1 Company Name: Koppers Company, Inc.
6. U.S. EPA ID Number: P A D 0 0 5 6 7 2 3 2 6 5

7. Transporter 2 Company Name
8. U.S. EPA ID Number

9. Designated Facility Name and Site Address: Koppers Co, Inc. Box 160, Tie Plant Road Tie Plant, MS 38960 601-226-4584
10. U.S. EPA ID Number: M S D 0 0 7 0 2 7 5 4 3

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

GENERATOR

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste Number |
|---|---|---|---|---|---|
| a. Nonhazardous process waste containing used creosote | 0 2 7 | D M | 1 5 6 6 0 (580) | | |
| b. Nonhazardous process waste containing used Pentachlorophenol | 0 4 8 | D M | 3 0 2 6 0 (630) | | |
| c. | (75) | | 45920 | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above
a. R. Q. Hazardous Substance, Liquid (or solid), N.O.S., ORM-E NA 9188
b.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves and eye protection.
NON-HAZARDOUS WASTE-FOR TRACKING PURPOSES ONLY.

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 the laws of the State of South Carolina.

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: Timothy Richardson — Signature: Timothy Richardson — Month Day Year: 10 12 3 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: C. W. CHOATE — Signature: C W Choate — Month Day Year: 10 12 3 88

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

FACILITY

19. Discrepancy Indication Space
a ____ lbs. c ____ lbs.
b ____ lbs. d ____ lbs.

20. Facility Owner or Operator; Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Month Day Year: 10 12 4 88

SPECTRIX MONROEVILLE

ABLE 1: SUMMARY OF ANALYTICAL DATA

PRODUCED ON 12/02/87 AT 16:37 PAGE 1

| AMPLE # | RSLT. LNE | | SOURCE |
|---|---|---|---|
| MOISTURE | | | |
| 7110413 | % Solids @103 C..... | : 80.3 | CYL 5 CLEANOUT |
| 7110414 | % Solids @103 C..... | : 78.9 | CREO BLOWDWN TK |
| 7110415 | % Solids @103 C..... | : 67.9 | PCP SEPARATOR |
| ROSS HEAT OF COMBUSTION | | | |
| 7110413 | BTU/lb..... | : 3920 | CYL 5 CLEANOUT |
| 7110414 | BTU/lb..... | : 7201 | CREO BLOWDWN TK |
| 7110415 | BTU/lb..... | : 5600 | PCP SEPARATOR |

e above results are on an as received basis.

SPECTRIX MONROEVILLE

ABLE 2: SUMMARY OF METALS DATA PRODUCED ON 12/02/87 AT 16:40 PAGE :

| AMPLE # | RSLT. LNE | | SOURCE |
|---|---|---|---|
| RSENIC | | | |
| 7110413 | Arsenic, ug/Kg..... | : 26300 | CYL 5 CLEANOUT |
| 7110414 | Arsenic, ug/Kg..... | : 43200 | CREO BLOWDWN TK |
| 7110415 | Arsenic, ug/Kg..... | : 239000 | PCP SEPARATOR |
| ORON | | | |
| 7110413 | Boron, ug/Kg..... | : <4930 | CYL 5 CLEANOUT |
| 7110414 | Boron, ug/Kg..... | : <4250 | CREO BLOWDWN TK |
| 7110415 | Boron, ug/Kg..... | : <2430 | PCP SEPARATOR |
| HROMIUM | | | |
| 7110413 | Chromium, ug/Kg..... | : 25500 | CYL 5 CLEANOUT |
| 7110414 | Chromium, ug/Kg..... | : 58900 | CREO BLOWDWN TK |
| 7110415 | Chromium, ug/Kg..... | : 343000 | PCP SEPARATOR |
| OPPER | | | |
| 7110413 | Copper, ug/Kg..... | : 49300 | CYL 5 CLEANOUT |
| 7110414 | Copper, ug/Kg..... | : 77800 | CREO BLOWDWN TK |
| 7110415 | Copper, ug/Kg..... | : 68300 | PCP SEPARATOR |
| INC | | | |
| 7110413 | Zinc, ug/Kg..... | : 33800 | CYL 5 CLEANOUT |
| 7110414 | Zinc, ug/Kg..... | : 108000 | CREO BLOWDWN TK |
| 7110415 | Zinc, ug/Kg..... | : 20800 | PCP SEPARATOR |

e above results are on a dry weight basis.

KEYSTONE ENVIRONMENTAL RESOURCES, INC.

TABLE OF CONTENTS

PRODUCED ON 04/11/88 AT 14:32 PAGE

| SAMPLE # | SOURCE | DESCRIPT | DATE-COL | DATE-REC | ORD # |
|---|---|---|---|---|---|
| 88030781 | 12196 | SEDIMENT | 03/14/88 | 03/18/88 | M8803095 |
| 88030782 | 12168 | SEDIMENT | 03/14/88 | 03/18/88 | M8803095 |
| 88030783 | 12186 | SEDIMENT | 03/14/88 | 03/18/88 | M8803095 |

KEYSTONE ENVIRONMENTAL RESOURCES, INC.

TABLE 1: SUMMARY OF ANALYTICAL DATA PRODUCED ON 04/11/88 AT 14.36 PAGE

| SAMPLE # | RSLT. LNE | | SOURCE |
|---|---|---|---|
| % MOISTURE | | | |
| 88030781 | % Solids @103 C..... | : 74.7 .0747 | 12196 |
| 88030782 | % Solids @103 C..... | : 70.9 .0709 | 12168 |
| 88030783 | % Solids @103 C..... | : 78.9 .0789 | 12186 |
| GROSS HEAT OF COMBUSTION | | | |
| 88030781 | BTU/lb..... | : 8350 ~~8.350~~ | 12196 |
| 88030782 | BTU/lb..... | : 7640 ~~7.640~~ | 12168 |
| 88030783 | BTU/lb..... | : 6810 ~~6.810~~ | 12186 |
| ARSENIC | | | |
| 88030781 | Arsenic, ug/Kg..... | : <50000 50 | 12196 |
| 88030782 | Arsenic, ug/Kg..... | : <50000 50 | 12168 |
| 88030783 | Arsenic, ug/Kg..... | : <50000 50 | 12186 |
| BORON | | | |
| 88030781 | Boron, ug/Kg..... | : 13300 13.300 | 12196 |
| 88030782 | Boron, ug/Kg..... | : 20300 20.300 | 12168 |
| 88030783 | Boron, ug/Kg..... | : 44200 44.200 | 12186 |
| CHROMIUM | | | |
| 88030781 | Chromium, ug/Kg..... | : 24500 24.50 | 12196 |
| 88030782 | Chromium, ug/Kg..... | : 22600 22.60 | 12168 |
| 88030783 | Chromium, ug/Kg..... | : 43800 43.80 | 12186 |
| COPPER | | | |
| 88030781 | Copper, ug/Kg..... | : 46000 46 | 12196 |
| 88030782 | Copper, ug/Kg..... | : 33400 33.40 | 12168 |
| 88030783 | Copper, ug/Kg..... | : 20900 20.90 | 12186 |
| ZINC | | | |
| 88030781 | Zinc, ug/Kg..... | : 90800 90.80 | 12196 |
| 88030782 | Zinc, ug/Kg..... | : 60100 60.10 | 12168 |
| 88030783 | Zinc, ug/Kg..... | : 84500 84.50 | 12186 |

The above metal results are on a dry weight basis.
All other results are on an as received basis.

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please Print or Type. (Form designed for use on elite typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD010191112018 | Manifest Document No. 87051626 | 2. Page 1 of 1

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

3. Generator's Name and Mailing Address: Koppers Co Inc. PO Box 351 Oroville California 95965

A. State Manifest Document Number: 87051626

4. Generator's Phone (916) 538-6535

B. State Generator's ID

5. Transporter 1 Company Name: Dart Trucking Co Inc. | 6. US EPA ID Number: [illegible]

C. State Transporter's ID: [illegible]

D. Transporter's Phone: [illegible]

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: Koppers Co Inc. Highway 51 South Wilmark Mississippi 38760 | 10. US EPA ID Number: MSD007012715

G. State Facility's ID

H. Facility's Phone: 601-226-4531

| 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 Solid NOS ORMS NA9189 | 1712 | DIM | 41000 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above: Manual Contains Pentachlorophenol, Oil Mixture, Wood, Dirt & Metal Asphalt 39 Cubes. Florida Hazardous Waste Report 12/2/87 Dated

K. Handling Codes for Wastes Listed Above: a. | b. | c. | d.

15. Special Handling Instructions and Additional Information: Although the material described above is classified as hazardous waste in California, it is not a hazardous waste pursuant to Florida or Miss. laws or regulations. The cost of the destruction transition of the material (very short) [illegible] was not required take permitted Hazardous waste [illegible]

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: Michael J Calcatera | Signature: [signature] | Month Day Year: 10 7 0 8 8 8

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Elizabeth McFarland | Signature: [signature] | Month Day Year: 10 7 0 8 8 8

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: Norman K. Lindvall | Signature: [signature] | Month Day Year: 10 7 1 4 8 8

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

WHITE: TSDF RETAINS

INSTRUCTIONS ON THE BACK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
290 Division Street, San Francisco, CA 94103, Phone (415) 861-1863

LABORATORY NUMBER: 14027-1
CLIENT: KUPPERS CO.
SAMPLE ID: OIL PENTA SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.4 | 0.50 | EPA 7061 |
| Chromium (total) | 14 | 1.3 | EPA 7190 |
| Copper | 25 | 1.3 | EPA 7210 |
| Zinc | 100 | 2.5 | EPA 7950 |
| Boron | 55 | 1 | EPA 6010 |

BTU/POUND----------8,483
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 14027-2
CLIENT: KUPPERS CO.
SAMPLE ID: CELLON WT. SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.8 | 0.50 | EPA 7061 |
| Chromium (total) | 15 | 1.3 | EPA 7190 |
| Copper | 18 | 1.3 | EPA 7210 |
| Zinc | 9 | 2.5 | EPA 7950 |
| Boron | 44 | 1 | EPA 6010 |

BTU/POUND----------6,267
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

LABORATORY DIRECTOR

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD009112087
Manifest Document No. 010181
2. Page 1 of 1

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

State Manifest Document Number 87057625

3. Generator's Name and Mailing Address
Koppers Co Inc
PO Box 351 Oroville, California 95965

4. Generator's Phone (916) 533-6535

5. Transporter 1 Company Name
Dart Trucking Co Inc

6. US EPA ID Number
IWD009816582

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Koppers Co Inc
Highway 51 South
Meridian, Mississippi 39760

10. US EPA ID Number
MDS010702754

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 NOS
ORMC NA9189 — 87 DM 4013 010 P — State / EPA/Other

b. complete 6-30-88

c. 87 Drums — Give to Office 8/1/88 $100.00 per Drum — State / EPA/Other

d. — State / EPA/Other

J. Additional Descriptions for Materials Listed Above
Above [redacted] containing Pentachlorophenol, [redacted] dirt & metals
Extremely Hazardous Waste Permit 1-2004 Dated 1-22-88

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Above material is classified as a hazardous waste in California it is not a hazardous waste pursuant to Federal or Mississippi laws + Regulations. Therefore the destination to which the material is being shipped Meridian, Miss. is not required to be a permitted hazardous waste treatment storage or disposal facility. The material will be burned as a industrial fuel, offline for energy recovery

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: Michael Calcateria — Signature: [signature] — Month Day Year: 10 6 1 3 8 8

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ED STRAIGHT — Signature: Ed Straight — Month Day Year: 10 6 1 3 8 8

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: MONROE HARPER — Signature: Monroe Harper — Month Day Year: 10 6 1 7 8 8

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

White: TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

INSTRUCTIONS ON THE BACK

GENERATOR

IN CALIFORNIA CALL 1-800-852-7550

IN OTHER STATES, CALL THE NATIONAL RESPONSE CENTER

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite [illegible] typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD009112087
Manifest Document No. 00[illegible]
2. Page 1 of 1

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

3. Generator's Name and Mailing Address
[illegible] Inc
PO Box 351 Oroville, California 95965

4. Generator's Phone (916) 533-6535

5. Transporter 1 Company Name: Dart Tank Co Inc
6. US EPA ID Number: OHD096658221

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

9. Designated Facility Name and Site Address
[illegible] Highway 51 South
Hernando, Mississippi 38960
10. US EPA ID Number: MDS007027543

A. State Manifest Document Number: 87057625
B. State Generator's ID
C. State Transporter's ID: 700204
D. Transporter's Phone: 1-800-[illegible]
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 601-226-4584

| 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. RQ Hazardous Waste, liquid NOS ORMD, NA 9189 | 87 | DM | 40300 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above: Non-regulated contents [illegible] oil components and debris [illegible] Hazardous Waste Permit 1-2064 Dated 1-22-86

K. Handling Codes for Wastes Listed Above: a. [illegible] b. [illegible] c. d.

15. Special Handling Instructions and Additional Information
[illegible] is not a hazardous waste pursuant to [illegible] laws & Regulations. Therefore, the destination [illegible] Hernando, Mississippi [illegible] to be a permitted treatment, storage and disposal facility. The material will be burned as a [illegible]

16. [illegible]

**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: Michael Cakotez
Signature: Michael Cakotez
Month Day Year: 06 13 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ED STRAIGHT
Signature: Ed Straight
Month Day Year: 06 13 88

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: MONROE HARPER
Signature: Monroe Harper
Month Day Year: 06 17 88

GENERATOR
TRANSPORTER
FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

WHITE: TSDF RETAINS

INSTRUCTIONS ON THE BACK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
290 Division Street, San Francisco, CA 94103, Phone (415) 861-1863

LABORATORY NUMBER: 14027-1
CLIENT: KUPPERS CO.
SAMPLE ID: OIL PENTA SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.4 | 0.50 | EPA 7061 |
| Chromium (total) | 14 | 1.3 | EPA 7190 |
| Copper | 25 | 1.3 | EPA 7210 |
| Zinc | 100 | 2.5 | EPA 7950 |
| Boron | 55 | 1 | EPA 6010 |

BTU/POUND----------8,483
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 14027-2
CLIENT: KUPPERS CO.
SAMPLE ID: CELLON WT. SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.8 | 0.50 | EPA 7061 |
| Chromium (total) | 15 | 1.3 | EPA 7190 |
| Copper | 18 | 1.3 | EPA 7210 |
| Zinc | 9 | 2.5 | EPA 7950 |
| Boron | 44 | 1 | EPA 6010 |

BTU/POUND----------6,267
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

LABORATORY DIRECTOR

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. COD007077175

Manifest Document No. 880601

2. Page 1 of 1

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

3. Generator's Name and Mailing Address

Koppers Company, Inc.
465 West 56th Avenue
Denver, CO 80216

4. Generator's Phone ( 303 ) 295-2823

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: Dart Trucking Company, Inc.

6. US EPA ID Number: OHD009865825

C. State Transporter's ID

D. Transporter's Phone: 800-238-8357

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

Koppers Company, Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960

10. US EPA ID Number: MSD007027543

G. State Facility's ID

H. Facility's Phone

| 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. | | Nonhazardous process waste containing used creosote. | 75 | DM | 43820 ~~40,000~~ | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

75 at Give to Office 6/21 $50.00

5 Drums set to Bus 6/21

J. Additional Descriptions for Materials Listed Above

R. Q. Hazardous Substance, Solid, N.O.S. ORM-E,
NA 9188
(contains creosote)

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

When handling, wear protective equipment such as impervious gloves and eye protection
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY.

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.

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: Marvin D. Miller | Signature: Marvin D. Miller | Month 06 | Day 03 | Year 88

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: James Thurston | Signature: James Thurston | Month 06 | Day 03 | Year 88

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: GARY E. MCCLELLAND | Signature: Gary E. McClelland | Month 06 | Day 06 | Year 88

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL-RETURN TO GENERATOR

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CO0007077175
Manifest Document No. 980501
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Koppers Company, Inc.
455 West 56th Avenue
Denver, CO 80216

4. Generator's Phone ( 303 ) 295-2823

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

5. Transporter 1 Company Name: Dart Trucking Company, Inc.
6. US EPA ID Number: CHD009865825
C. State Transporter's ID
D. Transporter's Phone 800-238-8357

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
Koppers Company, Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960
10. US EPA ID Number: MSD007027543
G. State Facility's ID
H. Facility's Phone

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. | Nonhazardous process waste containing used creosote. | | 76 | DT | 40,000 | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
R. Q. Hazardous Substance,Solid,N.O.S. ORM-E,
NA 9188
(contains creosote)

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves and eye protection
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY.

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.

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Printed/Typed Name: Marvin D. Miller
Signature
Month 06 Day 03 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: James Thurston
Signature
Month 06 Day 03 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month 06 Day 06 Year 88

T/S/D/F COPY

THE INDUSTRIAL LABORATORIES CO.
*Analytical and Consulting Chemists*

P.O. Box 16207
Denver, Colorado 80216

1450 East 62nd Avenue
(303) 287-9691

# ANALYSIS REPORT

KOPPERS
465 WEST 56TH
DENVER CO 80216
MARV MILLER

PAGE: 1
DATE RECEIVED: 01/07/88
DATE REPORTED: 01/26/88
LAB NUMBER: 0297
CUSTOMER P.O.:

SAMPLE MARKED: WASTE OIL

| ANALYSIS | RESULTS |
|---|---|
| BTU | 14,800 /# |
| COPPER | 55 PPM |
| CHROMIUM | 97 PPM |
| ARSENIC | 95 PPM |
| BORON | 8.0 PPM |
| ZINC | 93 PPM |

Send to Dave King
Hill Schedule
ASAP

ANALYTICAL RESULTS ARE INDICATIVE OF THE SUBMITTED SAMPLE ONLY AND MAY NOT
FLECT RESULTS OF SEEMINGLY IDENTICAL MATERIAL UNLESS SAMPLED BY OUR REPRESENTATIVE

MEMBERS OF: AMERICAN ASS'N OF CEREAL CHEMISTS, BAKERY ENGINEERS OF AMERICA, AMERICAN CHEMICAL SOCIETY, INSTITUTE OF FOOD TECHNOLOGY, AMERICAN OIL CHEMISTS' SOCIETY, SIGMA XI, ASS'N OF OFFICIAL RACING CHEMISTS
THIS REPORT IS NOT TO BE REPRODUCED, IN WHOLE OR IN PART, FOR ADVERTISING PURPOSES WITHOUT OBTAINING PRIOR WRITTEN AUTHORIZATION.

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . CCD007077175 . . . .
Manifest Document No. 820809 .
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Koppers Company, Inc.
455 East 36th Avenue
Denver, CO 80216

4. Generator's Phone ( 303 ) 295-2826

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
Dart Trucking Company, Inc.

6. US EPA ID Number
. ONDD09865825 . . . .

C. State Transporter's ID

D. Transporter's Phone 800-238-8357

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
Koppers Company, Inc.
Box 160, Tie Plant Road
Tie Plant, MS 38960 (601)226-4514

10. US EPA ID Number
. . MSD007027543. . .

G. State Facility's ID

H. Facility's Phone

| 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. | | Nonhazardous process waste containing used Creosote | 85 | DM | 46,400 ~~48,000~~ | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
R. Q. Hazardous Substance, Liquid & Solid, N.O.S.,
ORM-E, NA 9188 53 Liquid
(contains creosote) 32 Solid

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
When handling, wear protective equipment such as impervious gloves and eye protection.
NON-HAZARDOUS WASTE - FOR TRACKING PURPOSES ONLY.

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.

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: F. L. Brown
Signature: [signature]
Month 08 Day 08 Year 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ed Straight
Dart Trucking Company, Inc.
Signature: [signature]
Month 08 Day 09 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month 08 Day 12 Year 88

GENERATOR

TRANSPORTER

FACILITY

COPY

THE INDUSTRIAL LABORATORIES CO.
*Analytical and Consulting Chemists*

P.O. Box 16207
Denver, Colorado 80216

1450 East 62nd Avenue
(303) 287-9691

# ANALYSIS REPORT

KOPPERS
465 WEST 56TH
DENVER CO 80216
MARV MILLER

PAGE: 1
DATE RECEIVED: 01/07/88
DATE REPORTED: 01/26/88
LAB NUMBER: 0297
CUSTOMER P.O.:

SAMPLE MARKED: WASTE OIL

| ANALYSIS | RESULTS |
|---|---|
| BTU | 14.800 /# |
| COPPER | 55 PPM |
| CHROMIUM | 97 PPM |
| ARSENIC | 95 PPM |
| BORON | 8.0 PPM |
| ZINC | 93 PPM |

Send to Dave King
Will schedule
FISAP

ANALYTICAL RESULTS ARE INDICATIVE OF THE SUBMITTED SAMPLE ONLY AND MAY NOT
LECT RESULTS OF SEEMINGLY IDENTICAL MATERIAL UNLESS SAMPLED BY OUR REPRESENTATIVE

MEMBERS OF: AMERICAN ASS'N OF CEREAL CHEMISTS, BAKERY ENGINEERS OF AMERICA, AMERICAN CHEMICAL SOCIETY, INSTITUTE OF FOOD TECHNOLOGY, AMERICAN OIL CHEMISTS' SOCIETY, SIGMA XI, ASS'N OF OFFICIAL RACING CHEMISTS
THIS REPORT IS NOT TO BE REPRODUCED, IN WHOLE OR IN PART, FOR ADVERTISING PURPOSES WITHOUT OBTAINING PRIOR WRITTEN AUTHORIZATION.
ES ARE DISCARDED IN 15 DAYS FROM DATE OF REPORT UNLESS WE ARE REQUESTED, IN WRITING, TO RETAIN THEM FOR A LONGER PERIOD. PERISHABLE SAMPLES ARE USUALLY DISCARDED IMMEDIATELY UNLESS CLIENT HAS REQUESTED SPECIAL HANDLING IS REQUIRED

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: C.O.D 507077175
Manifest Document No.: 850809A
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

**GENERATOR**

3. Generator's Name and Mailing Address: Koppers Co., Inc., 4[illegible] N. 56th Ave., Denver, CO80216
4. Generator's Phone ( 303 ) 295-2826
5. Transporter 1 Company Name: J. C. Trucking, Inc.
6. US EPA ID Number: COD000695106
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address:
10. US EPA ID Number:

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

| 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. | | R.Q. Hazardous Substance, ~~Liquid~~ Solid N.O.S. CRM-[illegible], NA 9138 (contains creosote) ~~53 liquid~~ | 46 | DM | 23,000 | P | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above: When handling, ~~wear~~ protective equipment such as impervious gloves and eye protection. NON-HAZARDOUS WASTE (EXCEPT IN COLORADO) - FOR TRACKING PURPOSES, ONLY.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information: [illegible] hazardous waste [illegible] or Mississippi for energy recovery.

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.

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: F. L. Brown
Signature: [signature]
Month 1 2 Day 1 9 Year 8 8

**TRANSPORTER**

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Manny Wolff
Signature: [signature]
Month 1 2 Day 1 9 Year 8 8

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: GARY L. MCCLELLAND
Signature: [signature]
Month 1 2 Day 1 9 Year 8 8

T/S/D/F COPY

THE INDUSTRIAL LABORATORIES CO.
*Analytical and Consulting Chemists*

P.O. Box 16207
Denver, Colorado 80216

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# ANALYSIS REPORT

KOPPERS
465 WEST 56TH
DENVER CO 80216
MARV MILLER

PAGE: 1
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SAMPLE MARKED: WASTE OIL

| ANALYSIS | RESULTS |
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| BTU | 14,800 /# |
| COPPER | 55 PPM |
| CHROMIUM | 97 PPM |
| ARSENIC | 95 PPM |
| BORON | 8.0 PPM |
| ZINC | 93 PPM |

Send to Dave King
Will schedule
ASAP

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ES ARE DISCARDED IN 15 DAYS FROM DATE OF REPORT UNLESS WE ARE REQUESTED, IN WRITING, TO RETAIN THEM FOR A LONGER PERIOD. PERISHABLE SAMPLES ARE USUALLY DISCARDED IMMEDIATELY UNLESS CLIENT HAS REQUESTED SPECIAL HANDLING (FREEZING, ETC.) IN ADVANCE

8/1/88

OMB#: 2050-0024 Expires 12-3

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

# U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Generation and Management Report

FORM **IC**

## IDENTIFICATION AND CERTIFICATION

**WHO MUST COMPLETE THIS FORM?** Form IC must be completed by every site that received this package.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 8 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Complete Sections I through IV and Sections VI through IX immediately. Complete Section V, certification, after you have finished the full report package.

**SEC. I.** Site name and physical location which may differ from the mailing address. Complete items A through G.
Mark [X] for items A, B, C, D, F, and G if same as label; if different, enter corrections. If label is absent, enter information.

A. Site/company name — Same as label [X] — or →

B. EPA ID No. — Same as label [X] — or →

C. Address number and street name of physical location - If not known, enter industrial park, building name or other physical location description — Same as label [X] — or →

D. City, town, village, etc. — Same as label [X] — or →

E. County

F. State — Same as label [X] — or →

G. Zip Code — Same as label [X] — or →

**SEC. II.** Mailing address of site.
Mark [X] for A, B, C, and D if same as label; if different, enter corrections.

A. Number and street name of mailing address — Same as label [ ] — or → P.O. Box 160

B. City, town, village, etc. — Same as label [X] — or →

C. State — Same as label [X] — or →

D. Zip Code — Same as label [X] — or →

**SEC. III.** Name, title, and telephone number of the person who should be contacted if questions arise regarding this report.

| A. Please print: Last name | First name | M.I. | B. Title | C. Telephone |
|---|---|---|---|---|
| Clayton, Jackie D. | | | Plant Manager | 601 226-4584 Extension |

**SEC. IV.** Enter the Standard Industrial Classification (SIC) Code that describes the principal products, group of products, produced or distributed, or the services rendered at the site's physical location. Enter more than one SIC Code only if no one industry description includes the combined activities of the site. SIC codes are listed beginning on page 1 of the 1987 Hazardous Waste Generation, Shipment and Management Report Codebook.

| A. | B. | C. | D. | E. | F. |
|---|---|---|---|---|---|
| 2491 | | | | | |

**SEC V.** I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| A. Please print: Last name | First name | M.I. | Title |
|---|---|---|---|
| Clayton, Jackie D. | | | Plant Manager |

B. Signature: Jackie D. Clayton

Date of signature: 5 (Mo.) 31 (Day) 88 (Yr.)



OVER →

EPA Form 8700 - 13A/B (5-80) (Rev. 11-85) Revised (12-87)

**SEC. VI.** Does this site's EPA ID authorize hazardous waste generation?

- [ ] NO → SKIP TO SECTION VII.
- [X] YES → Did this site generate any hazardous waste during 1987?
  - [X] YES → READ DETAILED INSTRUCTION ON PAGE 4 OF THE 1987 HAZARDOUS WASTE GENERATION AND MANAGEMENT REPORT INSTRUCTIONS BOOKLET FOR ACUTE AND ACCUMULATION LIMITS. MARK [X] NEXT TO THE HAZARDOUS WASTE GENERATION QUANTITY CATEGORY THAT APPLIED TO THIS SITE DURING 1987.
    - [X] Category 1: More than 1000 kg (2,200 lb) in one or more months
    - [ ] Category 2: More than 100 kg (220 lb) but no more than 1000 kg (2,200 lb) in any single month
    - [ ] Category 3: No more than 100 kg (220 lb) in any single month
      - [ ] Mark [X] if this site changed from Category 1 to Category 2 or 3 due to waste minimization activity conducted during 1986 or 1987.
  - [ ] NO → CONTINUE BELOW, MARK [X] NEXT TO ALL THAT APPLY.
    - [ ] Generated, excluded or delisted wastes
    - [ ] Generated hazardous waste prior to 1987 but do not expect to generate in the future - MARK [X] FOR REASON IN ONE BOX BELOW
      - [ ] Waste was from one-time event(s) (e.g. spills, remedial actions, etc.)
      - [ ] Waste minimization activity undertaken during 1986 or 1987
      - [ ] Out of business
    - [ ] Generated hazardous waste prior to 1987 and expect to generate in the future
    - [ ] Never generated before but expect to generate in the future
    - [ ] Never generated and do not expect to generate in the future - MARK [X] FOR REASON IN ONE BOX BELOW
      - [ ] Protective notifier only
      - [ ] Misunderstood the requirements
      - [ ] Notified to secure transportation services
      - [ ] Other EXPLAIN REASON FOR GENERATOR NOTIFICATION IN COMMENTS

**SEC. VII.** Does this site have RCRA Interim Status or a RCRA permit to treat, store, or dispose hazardous waste?

- [ ] NO → SKIP TO SECTION VIII
- [X] YES → Did the site treat, store, or dispose (T/S/D) hazardous waste in RCRA-regulated units during 1987?
  - [X] YES → SKIP TO SECTION VIII
  - [ ] NO → CONTINUE BELOW, MARK [X] NEXT TO ALL THAT APPLY
    - [ ] T/S/D excluded waste during 1987
    - [ ] T/S/D hazardous waste in exempt units during 1987
    - [ ] T/S/D hazardous waste prior to 1987 but did not T/S/D waste during 1987. MARK [X] IN ONE BOX BELOW
      - [ ] T/S/D will resume in the future
      - [ ] Have notified of planned closure
      - [ ] Site is in closure or post closure
    - [ ] Never T/S/D hazardous waste prior to 1987 but: MARK [X] IN ONE BOX BELOW
      - [ ] Expect to T/S/D hazardous waste in the future
      - [ ] Do not expect to T/S/D hazardous waste in the future - EXPLAIN REASON FOR INTERIM STATUS OR PERMIT IN COMMENTS

**SEC. VIII.** Do you wish to withdraw this site's generator notification or EPA Part A permit application?

| | | |
|---|---|---|
| Withdraw generator notification | [ ] Yes | [X] No |
| Withdraw Part A permit application | [ ] Yes | [X] No |

**SEC. IX.** Does this site have an area not requiring a RCRA Part A or Part B permit that is used exclusively for the short term accumulation of hazardous waste?

- [X] NO
- [ ] YES → DOES THE AREA HAVE:

| | | |
|---|---|---|
| Containers | [ ] No | [ ] Yes |
| Tanks | [ ] No | [ ] Yes → |

ENTER THE NUMBER OF TANKS AND THEIR TOTAL CAPACITY IN GALLONS.

| | | | |
|---|---|---|---|
| | Number | | Gallon capacity |

**Comments:**

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Generation and Management Report

FORM **GM**

**WASTE GENERATION AND MANAGEMENT**

**WHO MUST COMPLETE THIS FORM?** Form GM must be completed by every site that generated hazardous waste on site or shipped hazardous waste off site during 1987.

☐ Mark ☒ if you are not required to complete Form GM.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 12 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Make and complete a photocopy of this form for each hazardous waste generated on site or shipped off site during 1987.

Complete Sections I through IV. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

**Sec. I**

A. Waste description (Instruction Page 12): Bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol

B. EPA hazardous waste code (Page 12): K001

C. State hazardous waste code (Page 13): K001

D. SIC code (Page 13): 2491

E. Source code (Page 13): 29

F. Waste form code (Page 13): N89 or N85

G. Waste minimization results (Page 13): B

**Sec. II**

A. Organics (Instruction Page 14): High ; Low ; Test ; Note D

B. Water (Page 15): High C; Low K; Note

C. Total Solids (Page 15): High C; Low K; Note

D. Suspended Solids (Page 15): High ; Low ; Note D

E. BTU (Page 16): High ; Low ; UOM ; Note D

F. Toxic Metals (Page 16) Note C

| Metal | High | Low | Test |
|---|---|---|---|
| 1. AS | | X | T |
| 2. CU | | W | T |
| 3. TG | | W | T |
| 4. PB | | W | T |
| 5. NI | | X | T |
| 6. HG | | Y | T |

G. pH (Page 18): High . ; Low . ; Note G

H. Flashpoint (Page 18): High °F; Low °F; Note G

I. Cyanides (Page 19): High ; Low ; Test ; Note C

J. Halogens (Page 20): High ; Low ; Note N

K. Radioactive (Page 20): Yes ☐; No ☒; Note N

**Sec. III**

A. 1986 quantity generated (Instruction Page 20): 2500

B. 1987 quantity generated (Page 20): 2500

C. UOM (Page 21): P

D. Density (Page 21): . NA; ☐ lbs/gal ☐ sg

E. Waste origin (Page 21) Code A; On-site T/S/D/R code

F. On-site T/S/D/R code (Page 21): 1. S04 2. NA 3. NA 4. NA 5. NA 6. NA 7. NA 8. NA

**Sec. IV**

A. EPA ID No. of facility to which waste was shipped (Instruction Page 22): See comments .....

B. Number of shipments (Page 22):

C. Transport mode (Page 23):

D. Off-site T/S/D/R code (Page 23):

E. Total Quantity shipped (Page 23):

**Comments:** All hazardous waste generated in 1987 was stored on site during 1987■ No hazardous waste shipped off-site in 1987■ Section II(F) Toxic Metals - AG, CD,PI,SE <1 ppb■Section I(E)-K001 waste ■ BA - Test not done (Section II (F) )

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Generation and Management Report

FORM **WR**

**WASTE RECEIVED FROM OFF SITE**

**WHO MUST COMPLETE THIS FORM?** Form WR must be completed by every site that received hazardous waste from an off-site source during 1987.

☐ Mark ☒ if you are not required to complete Form WR.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 24 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Photocopy and complete additional copies of this form if your site received more than two hazardous wastes from off site during 1987.

For each waste, complete boxes A through J. Throughout this form enter "DK" if the information requested is not known or not available; enter "NA" if the information is not applicable.

**Waste 1**

A. Description of hazardous waste, Instruction Page 24: Soil, sand, rock contaminated with creosote - spill cleanup

B. EPA hazardous waste code, Page 24: U051

C. State hazardous waste code, Page 25:

D. Off-site source EPA ID No., Page 25: ILD008199466

E. 1987 Quantity received, Page 25: 2200

F. UOM, Page 25: P

G. Density, Page 25: ☐ lbs/gal ☐ sg

H. Waste form code, Page 25: H99

I. Number of shipments, Page 25: 001

J. On-site T/S/D/R code, Page 26:
1 501 2 NA 3 NA 4 NA
5 NA 6 NA 7 NA 8 NA

**Waste 2**

A. Description of hazardous waste, Instruction Page 24:

B. EPA hazardous waste code, Page 24:

C. State hazardous waste code, Page 25:

D. Off-site source EPA ID No., Page 25: Same as above ☐ Mark ☒ if same as in Waste 1
dr ->

E. 1987 Quantity received, Page 25:

F. UOM, Page 25:

G. Density, Page 25: ☐ lbs/gal ☐ sg

H. Waste form code, Page 25:

I. Number of shipments, Page 25:

J. On-site T/S/D/R code, Page 26:
1 2 3 4
5 6 7 8

Comments:

For use in test burn program.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

**U.S ENVIRONMENTAL PROTECTION AGENCY**

1987 Hazardous Waste Generation and Management Report

**FORM OI**

**OFF-SITE IDENTIFICATION**

**WHO MUST COMPLETE THIS FORM?** Form OI must be completed by every site that shipped hazardous waste off site and every site that received hazardous waste from off site during 1987.

☐ Mark [X] if you are not required to complete Form OI.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 27 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Complete A through E for each off-site installation to which you shipped waste or from which you received waste during 1987.

Complete A through D for every transporter you used during the reporting year.

Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable. Make and complete additional copies of this form if you need to identify more than four off-site installations or transporters.

**Site 1**

A. EPA ID No. of off-site installation or transporter Instruction page 27: ILD000819946

B. Name of off-site installation or transporter Page 27: Koppers Company, Inc.

C. Site type code Page 28: G

D. Site relationship code Page 28: S

E. Address of off-site installation Page 28
Street: N. Marion Street
City: Carbondale State: IL Zip Code: 62901-

**Site 2**

A. EPA ID No. of off-site installation or transporter Instruction page 27:

B. Name of off-site installation or transporter Page 27:

C. Site type code Page 28:

D. Site relationship code Page 28:

E. Address of off-site installation Page 28
Street:
City: State: Zip Code: -

**Site 3**

A. EPA ID No. of off-site installation or transporter Instruction page 27:

B. Name of off-site installation or transporter Page 27:

C. Site type code Page 28:

D. Site relationship code Page 28:

E. Address of off-site installation Page 28
Street:
City: State: Zip Code: -

**Site 4**

A. EPA ID No. of off-site installation or transporter Instruction page 27:

B. Name of off-site installation or transporter Page 27:

C. Site type code Page 28:

D. Site relationship code Page 28:

E. Address of off-site installation Page 28
Street:
City: State: Zip Code: -

**Comments:**

BEFORE COPYING FORM, ATTACH SITE IDE[illegible]TION LABEL OR ENTER:

SITE NAME: Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

1987 Hazardous Waste Generation and Management Report

**FORM WM**

**WASTE MINIMIZATION**

**PART I**

**WHO MUST COMPLETE THIS FORM?** Form WM Part I, describing efforts undertaken to implement waste minimization programs, must be completed by all generators required to file an Annual/Biennial Report. This requirement was established in response to statutory provisions included in the Hazardous and Solid Waste Amendments of 1984 (HSWA).

NOTE: Generators shipping hazardous waste off site are required to certify, on Item 16 of the Uniform Hazardous Waste Manifest, that they have a program in place to reduce, to the degree determined economically practicable, the volume and toxicity of hazardous waste generated. A similar certification must also be made by generators who have obtained a RCRA treatment, storage, or disposal permit. Consistent with these certification requirements, generators must report, on Form WM Part I, the efforts undertaken to implement waste minimization programs.

**INSTRUCTIONS:** Please read the detailed instructions on page 29 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Answer questions 1 through 10. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

1. Did this site create or expand a source reduction and recycling program?

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Create | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Expand | ☒ | ☐ | ☒ | ☐ | ☒ | ☐ |

2. Did this site have a written policy or statement that outlined goals, objectives and methods for source reduction and recycling of hazardous waste?

| | 1987 | 1986 | Prior Years |
|---|---|---|---|
| Yes | ☒ | ☒ | ☒ |
| No | ☐ | ☐ | ☐ |

3. What was the dollar amount of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste? ENTER ZERO (0) IF NONE.

| | 1987 | 1986 | Prior Years |
|---|---|---|---|
| Capital expenditures | $ DK | $ DK | $ DK |
| Operating costs | $ DK | $ DK | $ DK |

4. Did this site have an employee training program or provide incentives (bonuses, awards, personal recognition, etc.) to identify and implement source reduction and recycling opportunities and activities?

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Training | ☐ | ☒ | ☐ | ☒ | ☐ | ☒ |
| Incentives | ☒ | ☐ | ☒ | ☐ | ☒ | ☐ |



OVER -->

5. Did this site conduct a source reduction and/or recycling opportunity assessment or audit? Note: an opportunity assessment or audit is a procedure that identifies practices that can be implemented to reduce the generation of hazardous waste or the quantity which must subsequently be treated, stored or disposed.

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Site-Wide | X | | X | | X | |
| Process-Specific | X | | X | | X | |

6. Did this site identify or implement new SOURCE REDUCTION opportunities to reduce the volume and/or toxicity of hazardous waste generated at this site?

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Identify | | X | | X | | DK |
| Implement | X | | | X | | DK |

7. What factors have delayed or prevented implementation of SOURCE REDUCTION opportunities. MARK [X] NEXT TO ALL THAT APPLY.

- [ ] a. Insufficient capital to install new source reduction equipment or implement new source reduction practices.
- [ ] b. Lack of technical information on source reduction techniques, applicable to my specific production processes.
- [ ] c. Source reduction is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- [ ] d. Concern that product quality may decline as a result of source reduction.
- [ ] e. Technical limitations of the production processes.
- [ ] f. Permitting burdens.
- [ ] g. Other (SPECIFY) _____

8. Did this site identify or implement new RECYCLING opportunities to reduce the volume and/or toxicity of hazardous waste generated at this site or subsequently treated, stored, or disposed of on site or off site?

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Identify | | X | | X | X | |
| Implement | | X | | X | X | |

EPA ID NO. M S D 0 0 7 0 2 1 5 4 3

9. What factors have delayed or prevented implementation of on-site or off-site RECYCLING opportunities. MARK [X] NEXT TO ALL THAT APPLY.

- [ ] a. Insufficient capital to install new recycling equipment or implement new recycling practices.
- [ ] b. Lack of technical information on recycling techniques applicable to this site's specific production processes.
- [ ] c. Recycling is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- [ ] d. Concern that product quality may decline as a result of recycling.
- [ ] e. Requirements to manifest wastes inhibit shipments off site for recycling.
- [ ] f. Financial liability provisions inhibit shipments off site for recycling.
- [ ] g. Technical limitations of product processes inhibit shipments off site for recycling.
- [ ] h. Technical limitations of production processes inhibit on-site recycling.
- [ ] i. Permitting burdens inhibit recycling.
- [ ] j. Lack of permitted off-site recycling facilities.
- [ ] k. Unable to identify a market for recyclable materials.
- [ ] l. Other (SPECIFY) _____

10. Has this site requested or received technical information or financial assistance on source reduction and/or recycling practices from any of the following sources? MARK [X] NEXT TO ALL THAT APPLY.

| | 1987 | | 1986 | | Prior Years | |
|---|---|---|---|---|---|---|
| | Technical | Financial | Technical | Financial | Technical | Financial |
| a. Local government | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| b. State government | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| c. Federal government | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| d. Trade associations | [X] | [ ] | [X] | [ ] | [X] | [ ] |
| e. Educational institutions | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| f. Suppliers | [X] | [ ] | [X] | [ ] | [X] | [ ] |
| g. Other parts of your firm | [X] | [ ] | [X] | [ ] | [X] | [ ] |
| h. Other firms/consultants | [X] | [ ] | [X] | [ ] | [X] | [ ] |
| i. No request made | [ ] | [X] | [ ] | [X] | [ ] | [X] |
| j. Other (conferences, literature, etc.)_____ | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |

Comments: #4. Corporate program provides recognition/awards for various innovative ideas, including waste minimization.
#5. No formal audit program. This is addressed as part of corporate cost reduction effort.
#8. Re-use technology has been in effect for a number of years - "New" technology has not improved on effectiveness of methods used.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

1987 Hazardous Waste Generation and Management Report

**FORM WM**

**WASTE MINIMIZATION**

**PART II**

**WHO MUST COMPLETE THIS FORM?** Form WM Part II must be completed only by generators that engaged in an activity during 1987 that resulted in waste minimization.

Waste minimization means:
(1) reduction in the volume and/or toxicity of hazardous waste generated as a result of source reduction; and/or,
(2) reduction in the volume and/or toxicity of hazardous waste subsequently treated, stored, or disposed as a result of on-site or off-site recycling.

☐ Mark ☒ and do not complete this form if no waste minimization results were achieved during 1987.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 30 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Make and complete a photocopy of this form for each hazardous waste minimized in 1987.

Complete Sections I through IV. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

**Sec. I**

| A. EPA hazardous waste code Instruction Page 31 | B. State hazardous waste code Page 31 | C. Product or service description Page 31 | D. Product or service SIC code Page 31 |
|---|---|---|---|
| U051 | | Wood preservation | 2491 |

| E. Waste form code Page 31 | F. UOM Page 32 | G. Density Page 32 | H. Source description: Page 32 | I. Source code Page 32 |
|---|---|---|---|---|
| N89 | P | ≈ 10.00 ☒ lbs/gal ☐ sg | U051 - Creosote spills | 23 |

**Sec. II**

| A. 1986 quantity generated Instruction Page 33 | B. 1987 quantity generated Page 33 | C. Production ratio Page 33 | D. Toxicity change code Page 35 |
|---|---|---|---|
| See Comment | | 1.30 | 0 |

| E. Waste minimization: recycling Page 35 | F. Waste minimization: source reduction Page 36 |
|---|---|
| See Comment | See Comment |
| Code 1. ☐ 2. ☐ | Code 1. ☐ 2. ☐ 3. ☐ |
| Quantity recycled | Quantity prevented |

**Sec. III**

A. Narrative description of waste minimization project or activity and results achieved Instruction Page 43

No U051 waste generated during 1986 or 1987. Following corporate program optimizing good housekeeping practices, etc.



OVER —>

| Sec. IV. | **Instructions:** Answer questions 1 through 4. Mark ☒ next to the effects produced by the source reduction and/or recycling activity reported on this form in Sections I through III. |
|---|---|

1. What effect did this site's source reduction and/or recycling activity have on the **quantity of water effluent** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the quantity of water effluent
   - ☐ b. Decrease in the quantity of water effluent
   - ☒ c. No effect on the quantity of water effluent
   - ☐ d. Don't know

2. What effect did this site's source reduction and/or recycling activity have on the **toxicity of water effluent** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the concentration of hazardous constituents
   - ☐ b. Decrease in the concentration of hazardous constituents
   - ☒ c. No effect on the concentration of hazardous constituents
   - ☐ d. Don't know

3. What effect did this site's source reduction and/or recycling activity have on the **quantity of air emissions** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the quantity of air emissions
   - ☐ b. Decrease in the quantity of air emissions
   - ☒ c. No effect on the quantity of air emissions
   - ☐ d. Don't know

4. What effect did this site's source reduction and/or recycling activity have on the **toxicity of the air emissions** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the concentration of hazardous constituents
   - ☐ b. Decrease in the concentration of hazardous constituents
   - ☒ c. No effect on the concentration of hazardous constituents
   - ☐ d. Don't know

Comments:

II A,B,E,F, - Effects of waste minimization program cannot be fully evaluated by examining the quantities generated over time. This is because the generattion rates are highly variable and are primarily related to spill occurrences.

It is Koppers policy that its plant operations optimize and upgrade existing processes to the extent economically possible to achieve waste minimization and reduction.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

1987 Hazardous Waste Generation and Management Report

**FORM WM**

**WASTE MINIMIZATION**

**PART II**

**WHO MUST COMPLETE THIS FORM?**

Form WM Part II must be completed only by generators that engaged in an activity during 1987 that resulted in waste minimization.

Waste minimization means:
(1) reduction in the volume and/or toxicity of hazardous waste generated as a result of source reduction; and/or,
(2) reduction in the volume and/or toxicity of hazardous waste subsequently treated, stored, or disposed as a result of on-site or off-site recycling.

☐ Mark ☒ and do not complete this form if no waste minimization results were achieved during 1987.

**INSTRUCTIONS:**

Please read the detailed instructions beginning on page 30 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Make and complete a photocopy of this form for each hazardous waste minimized in 1987.

Complete Sections I through IV. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

**Sec. I**

| A. EPA hazardous waste code Instruction Page 31 | B. State hazardous waste code Page 31 | C. Product or service description Page 31 | D. Product or service SIC code Page 31 |
|---|---|---|---|
| K001 | | Wood Preservation | 2491 |

| E. Waste form code Page 31 | F. UOM Page 32 | G. Density Page 32 | H. Source description: Page 32 | I. Source code Page 32 |
|---|---|---|---|---|
| N85 | P | ≈ 10.00 ☒ lbs/gal ☐ sg | K001-Bottom Sediment Sludge | 29 |

**Sec. II**

| A. 1986 quantity generated Instruction Page 33 | B. 1987 quantity generated Page 33 | C. Production ratio Page 33 | D. Toxicity change code Page 35 |
|---|---|---|---|
| 2500 | 2500 | 1.30 | 0 |

| E. Waste minimization: recycling Page 35 | F. Waste minimization: source reduction Page 36 |
|---|---|
| Code 1. 0 2. | Code 1. 0 2. 3. |
| Quantity recycled | Quantity prevented |

**Sec. III**

A. Narrative description of waste minimization project or activity and results achieved Instruction Page 43

See Comments



OVER —>

| Sec. IV. | **Instructions:** Answer questions 1 through 4. Mark ☒ next to the effects produced by the source reduction and/or recycling activity reported on this form in Sections I through III. |
|---|---|

1. What effect did this site's source reduction and/or recycling activity have on the **quantity of water effluent** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the quantity of water effluent
   - ☐ b. Decrease in the quantity of water effluent
   - ☒ c. No effect on the quantity of water effluent
   - ☐ d. Don't know

2. What effect did this site's source reduction and/or recycling activity have on the **toxicity of water effluent** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the concentration of hazardous constituents
   - ☐ b. Decrease in the concentration of hazardous constituents
   - ☒ c. No effect on the concentration of hazardous constituents
   - ☐ d. Don't know

3. What effect did this site's source reduction and/or recycling activity have on the **quantity of air emissions** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the quantity of air emissions
   - ☐ b. Decrease in the quantity of air emissions
   - ☒ c. No effect on the quantity of air emissions
   - ☐ d. Don't know

4. What effect did this site's source reduction and/or recycling activity have on the **toxicity of the air emissions** produced by hazardous waste generation processes during 1987?

   - ☐ a. Increase in the concentration of hazardous constituents
   - ☐ b. Decrease in the concentration of hazardous constituents
   - ☒ c. No effect on the concentration of hazardous constituents
   - ☐ d. Don't know

Comments:

SIIIA. Effects of waste minimization program cannot be fully evaluated by examining the quantities generated over time. This is because the generation rates are highly variable and are primarily related to spill occurrences. Additionally, the new wastewater treatment system, which will result in waste minimization, has been in the planning/design stage since 1986, but will not be operational until 1988. It is Koppers policy that its plant operations optimize and upgrade existing processes to the extent economically possible to achieve waste minimization and reduction.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

1987 Hazardous Waste Generation and Management Report

**FORM PS**

**WASTE TREATMENT, STORAGE, DISPOSAL, OR RECYCLING PROCESS SYSTEMS**

**WHO MUST COMPLETE THIS FORM?** Form PS must be completed by every site that, during 1987, had one or more hazardous waste management systems, existing or under construction, composed of: (1) treatment, storage, disposal, or recycling processes subject to RCRA interim status or permit requirements; or (2) treatment, disposal, or recycling processes exempt from RCRA interim status or permit requirements.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 44 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Make and complete a photocopy of this form for each hazardous waste treatment, storage, disposal or recycling system operated or under construction during 1987.

Complete Sections I through IV. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

**Sec. I**

A. Waste treatment, storage, disposal or recycling system description (Instruction Page 57): Generation and storage of K001 waste in Surface Impoundment

B. System Identification (Page 57): Number 1 - Letter X

C. On-site T/S/D/R code(s) (Page 58): S04

D. Regulatory status code (Page 58): A

E. Operational status (Page 58): Code A, Year 1987

F. Number of months system was operational during 1987 (Page 59): 12

G. Type and number of units (Page 59): Type K, Number

**Sec. II**

A. 1987 influent quantity (Instruction Page 60): See comments
Total 53931.75
RCRA 1.25

B. UOM (Page 61): T

C. 1987 solid/sludge residual quantity (Page 61): See comments
Total 0
RCRA 1.25

D. 1987 aqueous effluent quantity (Page 62): See comments
Total 53931.75
RCRA

**Sec. III**

A. Maximum capacity (Instruction Page 63): @~10#/g
130650 0#

B. Operational capacity (Page 64): NA

C. Limitations on capacity (Page 65): N/A
1. 2. 3.

D. Commercial availability code (Page 65): D

E. Percent capacity commercially available (Page 65): 0 %

**Sec. IV**

A. Life expectancy (Instruction Page 66): <1 Years

B. Expected change in maximum capacity during next 5 years (through 1992) (Page 66):
☒ Yes (CONTINUE WITH BOX C)
☐ No (SKIP REMAINING QUESTIONS)

C. Increase or decrease in maximum capacity code (Page 66): D

D. Amount of change (Page 67): See comment

E. Expected year of change (Page 67): 1988

F. Future commercial availability code (Page 67): D

G. Percent future capacity commercially available (Page 67): 0 %

**Comments:**

Sect. II, A.C.D. - Based on 5000 gal/day of water to Surface Impoundment (5 days/week) with ~1.25 tons (2500#) K001 generated and retained in the bottom of the Surface Impoundment.

Sect. IV D. - Surface Impoundment to be eliminated and is scheduled for closure in 1988.

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Koppers Company, Inc.
Highway 51 South
Tie Plant, Mississippi 38960

EPA ID NO. MSD007027543

U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Generation and Management Report

FORM **PS**

# WASTE TREATMENT, STORAGE, DISPOSAL, OR RECYCLING PROCESS SYSTEMS

**WHO MUST COMPLETE THIS FORM?** Form PS must be completed by every site that, during 1987, had one or more hazardous waste management systems, existing or under construction, composed of: (1) treatment, storage, disposal, or recycling processes subject to RCRA interim status or permit requirements; or (2) treatment, disposal, or recycling processes exempt from RCRA interim status or permit requirements.

**INSTRUCTIONS:** Please read the detailed instructions beginning on page 44 of the 1987 Hazardous Waste Generation and Management Report instructions booklet before completing this form.

Make and complete a photocopy of this form for each hazardous waste treatment, storage, disposal or recycling system operated or under construction during 1987.

Complete Sections I through IV. Throughout this form enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable.

**Sec. I**

A. Waste treatment, storage, disposal or recycling system description (Instruction Page 57): Container Storage (See Comments)

B. System identification (Page 57): Number 2 - Letter X

C. On-site T/S/D/R code(s) (Page 58): See Comments — S01

D. Regulatory status code (Page 58): F

E. Operational status (Page 58): Code A, Year 1988

F. Number of months system was operational during 1987 (Page 59): ~02 See Comments

G. Type and number of units (Page 59): Type B, Number 004

**Sec. II**

A. 1987 influent quantity (Instruction Page 60): Total 0; RCRA 2200

B. UOM (Page 61): P

C. 1987 solid/sludge residual quantity (Page 61): Total 0; RCRA 2200

D. 1987 aqueous effluent quantity (Page 62): Total 0; RCRA 0

**Sec. III**

A. Maximum capacity (Instruction Page 63): See Comments

B. Operational capacity (Page 64): See Comments

C. Limitations on capacity (Page 65): See Comments 1. 2. 3.

D. Commercial availability code (Page 65): C

E. Percent capacity commercially available (Page 65): 000 %

**Sec. IV**

A. Life expectancy (Instruction Page 66): DK Years See Comments

B. Expected change in maximum capacity during next 5 years (through 1992) (Page 66): See Comments
☐ Yes (CONTINUE WITH BOX C)
☒ No (SKIP REMAINING QUESTIONS)

C. Increase or decrease in maximum capacity code (Page 66):

D. Amount of change (Page 67):

E. Expected year of change (Page 67): 19

F. Future commercial availability code (Page 67):

G. Percent future capacity commercially available (Page 67): %

Comments: During November 1987, 4 drums of U051 were received from Koppers Carbondale, IL. plant for use as a fuel additive in a test burn program in 1988 at Koppers Grenada, MS. The drums are being temporarily held in storage at the plant until the time of the test burn. Additionally, a permanent RCRA container storage building is being built for storage of hazardous wastes generated from both on-site and off-site Koppers locations. A RCRA Part "B" Application has been submitted for the Container Storage Facility.

Koppers Company, Inc., Pittsburgh, PA 15219
Telephone 412-227-2000

46

KOPPERS

RECEIVED
JUN - 2 1988
Dept. of Natural Resources
Bureau of Pollution Control

May 19, 1988 EXPRESS MAIL

Mississippi Dept. of Natural Resources
Bureau of Pollution Control
2380 Highway 80 West
Jackson, MS 39204

Dear Sir or Madam:

The completed 1987 Hazardous Waste Report for Koppers Grenada, MS facility is enclosed if you have any questions regarding this submission, please feel free to contact this office.

Sincerely,

J. D. Clayton

J. D. Clayton
Plant Manager

JDC/jsw

Encl.

cc: R. Anderson - Keystone Environmental Resources - Pgh.
D. King - " " " - N. Little Rock

Direct Dial Number 601-226-4584

OMB #: 2050-0024 Expires 12-31-88

United States
Environmental Protection Agency

RECEIVED
JUN - 8 1988
Dept. of Natural Resources
Bureau of Pollution Control

# 1987 Hazardous Waste Generation and Management Report (PACKAGE B)

# FORMS

**One** report package must be completed for **every** site receiving this mailing:

**Complete Package A** - 1987 Hazardous Waste Generation and Shipment Report - **If**, in 1987, hazardous wastes **were not** *managed* at this site, as defined in the box on page 1 of the instructions booklet.

**Complete Package B** - 1987 Hazardous Waste Generation and Management Report - **If**, in 1987, hazardous wastes **were** *managed* at this site, as defined in the box on page 1 of the instructions booklet.

**Submission of the appropriate Report package fulfills 1987 RCRA Annual/Biennial Report requirements.**

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite (12-pitch) typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No. CAD 0 8 1 1 2 1 8 1 7 | Manifest Document No. 0 0 1 8 1 5 | 2. Page 1 of 1

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

3. Generator's Name and Mailing Address: Rapport Co Inc, PO Box 351 Oroville California 95965

4. Generator's Phone: (916) 533-6535

A. State Manifest Document Number: 87057024

B. State Generator's ID:

5. Transporter 1 Company Name: Dart Transport Co. Inc.

6. US EPA ID Number: 1 0 4 4 1 2 6 1 0 9 7 1 9 6 1 5 1 2 1 2

C. State Transporter's ID: 1994

D. Transporter's Phone: (Bon 426-0575

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: Rapport Co Inc, Highway 51 South, Hermosa, Mississippi 38960

10. US EPA ID Number: M D 0 0 7 0 1 2 7 5 1 4 3

G. State Facility's ID:

H. Facility's Phone: (601-232-4554

| 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. RQ Hazardous Waste Liquids NOS ORM-E NA 9189 | 01817 | DM | 41121810 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above: Abandoned Barrels Containing Parathion, Methyl Parathion, Methyl Compounds, Wood, Dirt and Debris

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information: [illegible]

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: Michael Calcatera | Signature: Michael Calcatera | Month Day Year: 10 15 1 1 7 8 1 8

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John Schrack | Signature: John Schrack | Month Day Year: 10 15 1 1 7 8 1 8

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: GARY E. McCLELLAND | Signature: Gary E. McClelland | Month Day Year: 10 5 1 2 1 0 1 8 1 8

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

WHITE: TSDF RETAINS

INSTRUCTIONS ON THE BACK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
290 Division Street, San Francisco, CA 94103, Phone (415) 861-1863

LABORATORY NUMBER: 14027-1
CLIENT: KUPPERS CO.
SAMPLE ID: OIL PENTA SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.4 | 0.50 | EPA 7061 |
| Chromium (total) | 14 | 1.3 | EPA 7190 |
| Copper | 25 | 1.3 | EPA 7210 |
| Zinc | 100 | 2.5 | EPA 7950 |
| Boron | 55 | 1 | EPA 6010 |

BTU/POUND----------8,483
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE |
|---|---|---|
| Arsenic | 9.9 | 97 |
| Chromium | 17 | 90 |
| Boron | 32 | 93 |
| Copper | 18 | 100 |
| Zinc | 8.3 | 99 |

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 14027-2
CLIENT: KUPPERS CO.
SAMPLE ID: CELLON WT. SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.8 | 0.50 | EPA 7061 |
| Chromium (total) | 15 | 1.3 | EPA 7190 |
| Copper | 18 | 1.3 | EPA 7210 |
| Zinc | 9 | 2.5 | EPA 7950 |
| Boron | 44 | 1 | EPA 6010 |

BTU/POUND----------6,267
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

LABORATORY DIRECTOR

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite [illegible] typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD009112087
Manifest Document No.: 00888
Page 1 of 1

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

3. Generator's Name and Mailing Address: Koppers Co Inc, Po Box 351, Oroville California 95965

4. Generator's Phone: (916) 533-6535

A. State Manifest Document Number: 87057624

B. State Generator's ID:

5. Transporter 1 Company Name: Dart Trucking Co. Inc
6. US EPA ID Number: OHD009865825

C. State Transporter's ID: 1944

D. Transporter's Phone: 1-800-426-0895

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: Koppers Co Inc, Highway 51 South, Grenada, Mississippi 38960
10. US EPA ID Number: MDS007027543

G. State Facility's ID:

H. Facility's Phone: 601-226-4584

| 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 NOS ORME NA9189 | 087 | DM | 41280 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

$100.00 per Drum
Give to Office 8/1/88

J. Additional Descriptions for Materials Listed Above: Above material contains Pentachlorophenol, oil components, wood, dirt & metals
Extremely Hazardous Waste Permit 1-2004 Dated 1-22-88

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information: Although the material described above is classified as a hazardous material in California, it is not a hazardous waste pursuant to Federal or Mississippi Laws + Regulations. Therefore the destination to which the material is being shipped Grenada, Miss. is not required to be a permitted hazardous waste treatment, storage or disposal facility. The material will be burned as an industrial fuel Additive for energy recovery.

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: Michael Calcatera
Signature: Michael Calcatera
Month Day Year: 05 17 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: John Scherer
Signature: John Scherer
Month Day Year: 05 17 88

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: GARY E. McCLELLAND
Signature: Gary E. McClelland
Month Day Year: 05 20 88

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802, WITHIN CALIFORNIA CALL 1-800-852-7550

87057624

DHS 8022 A (1/87)
EPA 8700—22
Previous editions are obsolete.

White: TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

INSTRUCTIONS ON THE BACK

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite (12 pitch) typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No. CAD009112087 Manifest Document No. 87007823 2. Page 1 of 1

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

3. Generator's Name and Mailing Address
Reperto Inc
PO Box 351 Oroville, California 95965

4. Generator's Phone (916) 533-6535

A. State Manifest Document Number 87007823
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone (601) 222-4564

5. Transporter 1 Company Name: Dart Trucking Co Inc. 6. US EPA ID Number: OHD009896582

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

9. Designated Facility Name and Site Address
Reperto Inc
Highway 51 South
Hernando, Mississippi 38632
10. US EPA ID Number MDD070275543

| 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. Hazardous Waste Solid NOS (Type NA9189) | 08 | DM | 43620 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above
Above material contains Perchlorethylene, oil, grease, oxides, wood waste, metals
Extremely Hazardous Waste Permit 1-2009 Pt 2-2

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
Although the material described above is classified as hazardous waste in California, it is not a hazardous waste pursuant to Federal or Mississippi Laws or regulations. Therefore, the destination to which the material is being shipped, Hernando, Mississippi is not required to be a permitted hazardous waste facility.

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: Michael J Calcatera Signature: [signature] Month Day Year: 05 16 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Gerald A Fuccat Signature: [signature] Month Day Year: 05 16 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: MARK Good Signature: Mark Good Month Day Year: 05 16 88

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: Norman K Lindvall Signature: [signature] Month Day Year: 05 16 88

GENERATOR
TRANSPORTER
FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

87007823

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

WHITE: TSDF RETAINS

INSTRUCTIONS ON THE BACK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
290 Division Street, San Francisco, CA 94103, Phone (415) 861-1863

LABORATORY NUMBER: 14027-1
CLIENT: KUPPERS CO.
SAMPLE ID: OIL PENTA SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.4 | 0.50 | EPA 7061 |
| Chromium (total) | 14 | 1.3 | EPA 7190 |
| Copper | 25 | 1.3 | EPA 7210 |
| Zinc | 100 | 2.5 | EPA 7950 |
| Boron | 55 | 1 | EPA 6010 |

BTU/POUND----------
ASTM D240 ----------8,483

QA/QC SUMMARY

| | %RPD | %SPIKE |
|---|---|---|
| Arsenic | 9.9 | 97 |
| Chromium | 17 | 90 |
| Boron | 32 | 93 |
| Copper | 18 | 100 |
| Zinc | 8.3 | 99 |

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 14027-2
CLIENT: KUPPERS CO.
SAMPLE ID: CELLON WT. SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.8 | 0.50 | EPA 7061 |
| Chromium (total) | 15 | 1.3 | EPA 7190 |
| Copper | 18 | 1.3 | EPA 7210 |
| Zinc | 9 | 2.5 | EPA 7950 |
| Boron | 44 | 1 | EPA 6010 |

BTU/POUND----------6,267
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

LABORATORY DIRECTOR

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite [illegible] typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD009112087 — 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: Koppers Inc, PO Box 351 Oroville, California 95965
4. Generator's Phone (916) 533-6535
A. State Manifest Document Number: 87057823
B. State Generator's ID:
5. Transporter 1 Company Name: Dart Trucking Co Inc.
6. US EPA ID Number: MAD098658212
C. State Transporter's ID: 2095
D. Transporter's Phone:
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: Koppers Inc, Highway 51 South, Senatobia, Mississippi 38960
10. US EPA ID Number: MDD070275543
G. State Facility's ID:
H. Facility's Phone: 601-224-4564

| 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 Solid NOS CTME NA9189 | 08 | DM | 43620 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above: Above material contains benzo(a)pyrene, oil, creosote, wood debris, media. Hazardous Waste Permit (Part B) Effective 7-22-89
K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information: Although the manufacturer has classified this material as a hazardous waste in California, it is not a hazardous waste pursuant to Federal or Mississippi laws or regulations. Therefore, the destination to which the material is being shipped, Senatobia, Mississippi is not required to be a permitted hazardous waste facility. Therefore, please reference the manifest number on the manifest form.

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: Michael J Cakatera — Signature: [signature] — Month Day Year: 10 5 6 8 8

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GERALD R FIVECOAT — Signature: [signature] — Month Day Year: 10 5 6 8 8

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: MARK Good — Signature: Mark Good — Month Day Year: 10 5 11 4 8 8

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: Norman K Lindvall — Signature: [signature] — Month Day Year: 1 15 1 4 1 8 8

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802, WITHIN CALIFORNIA CALL 1-800-852-7550

TO TRANSPORTER — TO DESTINATION FACILITY

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 5-86) Previous editions are obsolete.

WHITE: TSCF RETAINS — INSTRUCTIONS ON THE BACK

DAVE BOCK 601-961-5171 418 Dawson

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite (12 pitch) typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CA D 009 911 121 817
Manifest Document No. 018 18 R
2. Page 1 of 1

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

3. Generator's Name and Mailing Address
Koppers Co Inc
PO Box 361 Oroville, California 95965

4. Generator's Phone (916) 533-6535

5. Transporter 1 Company Name: Dart Trucking Co Inc
6. US EPA ID Number: IDD 009 816 582

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

9. Designated Facility Name and Site Address
Koppers Co Inc
Highway 51 South
Grenada, Mississippi 38960
10. US EPA ID Number: MDS 007 027 543

A. State Manifest Document Number: 87057622
B. State Generator's ID
C. State Transporter's ID: 900209
D. Transporter's Phone: 916-426-0895
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 601-226-4584

| 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 Solid, NOS Solid, ORMS NA9189 | 01 | 6DM | 44 | 1010 P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above
Above material contains Pentachlorophenol, oil compounds, metals, wood & dirt.
Extremely Hazardous Waste Permit Waiver Asked 7-22-88

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Although the material described above is classified as hazardous waste in California it is not a hazardous waste pursuant to Federal or Mississippi Laws & Regulations. Therefore the destination to which the material is being shipped, Grenada Mississippi, is not required to be a permitted hazardous waste treatment, storage or disposal facility. The material will be burned in an industrial boiler in Grenada Miss. for energy recovery.

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: Michael Calcaterra
Signature: Michael Calcaterra
Month Day Year: 10 4 22 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ED STRAIGHT
Signature: Ed Straight
Month Day Year: 10 4 22 88

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: MONROE HARPER
Signature: Monroe Harper
Month Day Year: 10 4 26 88

GENERATOR

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

87057622

DHS 8022 A (1/87)
EPA 6700—22
(Rev. 9-86) Previous editions are obsolete.

White: TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

INSTRUCTIONS ON THE BACK

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-88)
Please print or type. (Form designed for use on elite [illegible] typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

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
Hoppers Co Inc
P Box 301 Oroville, California 95965

4. Generator's Phone ( 916 ) 533-4235

5. Transporter 1 Company Name: Dart Trucking Co Inc
6. US EPA ID Number: 10[illegible]

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

9. Designated Facility Name and Site Address
Hoppers Co Inc.
Highway 151 South
Sherrada, Mississippi 38760
10. US EPA ID Number: MDS[illegible]

A. State Manifest Document Number: 87057622
B. State Generator's ID
C. State Transporter's ID: 400209
D. Transporter's Phone: 916-426-0995
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 601-226-4554

| 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. Hazardous Waste Liquid NOS (Solid Oxide NA 1993) | 01816 | DM | 41412010 | P | State / EPA/Other |
| b. | | | | | State / EPA/Other |
| c. | | | | | State / EPA/Other |
| d. | | | | | State / EPA/Other |

J. Additional Descriptions for Materials Listed Above
[illegible]

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
[illegible]

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: Michael Calcaterra | Signature: [signature] | Month Day Year: 10 14 12 2 10

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ED STRAIGHT | Signature: Ed Straight | Month Day Year: 10 14 22 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | 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: MONROE HARPER | Signature: Monroe Harper | Month Day Year: 10 21 16 88

FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

WHITE: TSDF RETAINS

INSTRUCTIONS ON THE BACK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
290 Division Street, San Francisco, CA 94103, Phone (415) 861-1863

LABORATORY NUMBER: 14027-1
CLIENT: KUPPERS CO.
SAMPLE ID: OIL PENTA SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.4 | 0.50 | EPA 7061 |
| Chromium (total) | 14 | 1.3 | EPA 7190 |
| Copper | 25 | 1.3 | EPA 7210 |
| Zinc | 100 | 2.5 | EPA 7950 |
| Boron | 55 | 1 | EPA 6010 |

BTU/POUND----------8,483
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 14027-2
CLIENT: KUPPERS CO.
SAMPLE ID: CELLON WT. SLUDGE

DATE RECEIVED: 1/11/88
DATE DIGESTED: 1/20/88
DATE ANALYZED: 1/22/88
DATE REPORTED: 2/1/88


Metals in Soils & Wastes by Atomic Absorption Spectrophotometry
Digestion Method: EPA 3050

| METAL | RESULT mg/kg | DETECTION LIMIT mg/kg | METHOD |
|---|---|---|---|
| Arsenic | 4.8 | 0.50 | EPA 7061 |
| Chromium (total) | 15 | 1.3 | EPA 7190 |
| Copper | 18 | 1.3 | EPA 7210 |
| Zinc | 9 | 2.5 | EPA 7950 |
| Boron | 44 | 1 | EPA 6010 |

BTU/POUND----------6,267
ASTM D240

QA/QC SUMMARY

| | %RPD | %SPIKE | | %RPD | %SPIKE |
|---|---|---|---|---|---|
| Arsenic | 9.9 | 97 | Copper | 18 | 100 |
| Chromium | 17 | 90 | Zinc | 8.3 | 99 |
| Boron | 32 | 93 | | | |

LABORATORY DIRECTOR

2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX [illegible]

IL532-0610
LPC 62 8/81

Please print or type. (Form designed for use on el[illegible]-pitch) typewriter.) EPA Form 8700-22 (Rev. 9[illegible]) Form Approved. OMB No. 2050-0039, Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ILD 000819946
Manifest Document No.: 0001
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
Koppers Company, Inc.
P. O. Box 70
Carbondale, Il. 62901

4. Generator's Phone ( 618 ) 457-4175

A. Illinois Manifest Document Number: IL 1844865
B. Illinois Generator's ID: 0 7 7 8 0 1 0 0 0 2

5. Transporter 1 Company Name: Dart Trucking Co., Inc.
6. US EPA ID Number: OHD 009865825
C. Illinois Transporter's ID
D. ( 800 426-0825 ) 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
Koppers Company, Inc.
Tie Plant Route 68
Grenada, Mississippi 38960
10. US EPA ID Number: MSD 007027543
G. Illinois Facility's ID
H. Facility's Phone ( 601 ) 226-4584

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. RQ Non-Hazardous process waste liquid NOS N. A. 9188 (contains used pentachlorophenol) | 51 | DM | 2805 | 1 | EPA HW Number XX Authorization Number |
| b. Non-hazardous process waste (creosote Sludge) | 105 | DM | 550 | 1 | EPA HW Number XX Authorization Number |
| c. | | | 33,550 | | EPA HW Number XX Authorization Number |
| d. | | | | | EPA HW Number XX Authorization Number |

Give to Office

Actual Wt = 30,530 #

J. Additional Descriptions for Materials Listed Above
contains spent (used) pentachlorophenol
Dear pit sludge

K. Handling Codes for Wastes Listed Above In Item # 14
1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information
Rubber gloves and eye protection to be worn when handling drums

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: Gerald Hagler
Signature: Gerald Hagler
Date: Month Day Year 0 4 1 5 8 8

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Joe Renfro
Signature: Joe Renfro
Date: Month Day Year 0 4 1 5 8 8

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Date: Month Day Year 0 4 1 8 8 8

ILLINOIS: 217 / 782-3637 *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV 7

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111½, Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of not [illegible] $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.

GENERATOR COPY — PART 1-DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

FACILITY COPY - PART 3

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

March 24, 1988

Via FAX
601-961-5190

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of
Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

With this FAX transmission are copies of revised pages 1 of 5 and 2 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

If you need additional information, please feel free to contact me at (412) 227-2683.

Sincerely,

Robert J. Anderson/CJV

Robert J. Anderson
Staff Program Manager

RJA/CJV/jsw

Enclosures

(fill-in areas are spaced for elite type, i.e. [illegible] characters/inch).

FORM 3 RCRA — EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

Form Approved OMB No. 158-S80004

**I. EPA I.D. NUMBER**

F M S D 0 0 7 0 2 7 5 4 3

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: 8 | YR. 04 | MO. 01 | DAY 01

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN: YR. | MO. | DAY

**B. REVISED APPLICATION** *(place an "X" below and complete item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S04 | 130,650 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |



CONTINUE ON REVERSE

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Note: III.C. Line 1

650 cubic yards x 201 gal/yd$^3$ = 130,650 gallons

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.
Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K054 | 900 | P | T03 D80 | |
| X-2 | D002 | 400 | P | T03 D80 | |
| X-3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | included with above |

EPA Form 3510-3 (6-80)



CONTINUE ON PAGE 3

2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX 19275

IL532-0610
IPC 62 8/81

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 3-86) Form Approved. OMB No. 2050-0039, Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 000819946
Manifest Document No. 000
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
Koppers Company, Inc.
P.O.Box 70
Carbondale, Illinois 62901

4. Generator's Phone ( 618 ) 457-4173

A. Illinois Manifest Document Number IL 1844064
B. Illinois Generator's ID 0 7 7 8 0 1 0 0 0 2

5. Transporter 1 Company Name
Dart Trucking Co., Inc.
6. US EPA ID Number OHD 009865825
C. Illinois Transporter's ID
D. ( ) 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
Koppers Company, Inc.
Tie Plant, Route 68
Grenada, Mississippi 38960
10. US EPA ID Number MSD 007027543
G. Illinois Facility's ID
H. Facility's Phone (601) 226-4394

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. RQ Non-Hazardous process waste liquid NOS N. A. 9188 (contains used pentachlorophenol) | 87 | DM | 4785 | 1 | EPA HW Number XX / Authorization Number |
| b. | | | 46,150 RETURN | | EPA HW Number XX / Authorization Number |
| c. | | | | | EPA HW Number XX / Authorization Number |
| d. | | | | | EPA HW Number XX / Authorization Number |

Office $100.00 per Drum

J. Additional Descriptions for Materials Listed Above
Contains spent (used) pentachlorophenol

K. Handling Codes for Wastes Listed Above in Item # 14
1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information
Rubber gloves and eye protection to be worn when handling drums

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: Clark J. Mitchell
Signature: Clark J. Mitchell
Date: Month 03 Day 08 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ronnie Coffey
Signature: Ronnie Coffey
Date: Month 03 Day 08 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Date: Month 03 Day 09 Year 88

IN ILLINOIS: 217 / 782-3637 *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV 7

GENERATOR COPY — PART 1-DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111½, Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of 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 Environmental Protection Agency.

Center IEPA COPY - PART 2

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P.O. Box 2063
Harrisburg, PA 17120

ER-SWM-51:REV. 10/84

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2000-0404. Expires 7-31-86

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: PAD056723265
Manifest Document No.: 5000

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
KOPPERS COMPANY, INC., P.O. BOX 189, MONTGOMERY, PA. 17752-0189

4. Generator's Phone (717) 547-1651

A. State Manifest Document Number: PAB 2715845

B. State Gen. ID: PAD 056723265

5. Transporter 1 Company Name: DART TRUCKING CO., INC.

6. US EPA ID Number: OHD009865825

C. State Trans. ID: PA-AH 0219

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (800) 238-8357

E. State Trans. ID: PA-AH

9. Designated Facility Name and Site Address
KOPPERS COMPNAY, INC., P.O. BOX 160
GRENADA, MS 38960

10. US EPA ID Number: MSD007027543

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone ( )

| 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-Non HAZARDOUS PROCESS WASTE N.O.S. LIQUID ORM-R NA 9188 (CONTAINS USED CREOSOTE) | 70 | DM | 4520 | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

Eff 50.00 per Drum

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 [b] of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

GENERATOR

Printed/Typed Name: THOMAS D. LOADMAN
Signature: Thomas D. Loadman
Month Day Year: 02 15 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Henry J. Reddick III
Signature: Henry J. Reddick III
Month Day Year: 02 15 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month Day Year: 02 17 88

PAB 2715845

EPA Form 8700-22 (3-84)

COPY 4 - TSD Facility - Retained by TSD Facility

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P.O. Box 2063
Harrisburg, PA 17120

ER-SWM-51:REV 10/8

Please print or type. (Form designed for use on elite (12 pitch) typewriter.)
Form Approved. OMB No. 2000 0404. Expires 7 31 86

*PABX2715834*

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P·A·D·0·5·6·7·2·3·2·6
Manifest Document No. 5·0·0·0·0

2. Page 1 of 1

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

A. State Manifest Document Number: PAB 2715834

B. State Gen. ID: PAD 056723265

C. State Trans. ID: PA-AH 0·2·1·9

D. Transporter's Phone (800) 238-8357

E. State Trans. ID: PA-AH

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone ( )

3. Generator's Name and Mailing Address
KOPPERS COMPANY INC P.O.BOX 189 MONTGOMERY, PA 17752-0189

4. Generator's Phone ( 717 ) 547-1651

5. Transporter 1 Company Name
DART TRUCKING CO., INC

6. US EPA ID Number: O.H.D.0.0.9.8.6.5.8.2.5

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
KOPPERS COMPANY INC P.O.BOX 160
GRENADA, MS 38960

10. US EPA ID Number: M·S·D·0·0·7·0·2·7·5·4·3

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-NON HAZARDOUS PROCESS WASTE N.O.S. LIQUID ORM-E NA 9188 (CONTAINS USED CREOSOTE) | 70 | DM | 4400 | | |
| b. $50.00 | | | | | |
| c. $50.00 | | | | | |
| d. 1-205-834-5290 | | | | | |

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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 all applicable State laws/regulations.

Printed/Typed Name: C. David Choate
Signature: C. David Choate
Date: Month 0·2 Day 0·8 Year 8·8

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Michael W. Smith
Signature: Michael W. Smith
Date: Month 0·2 Day 0·8 Year 8·8

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Date: Month 0·2 Day 1·0 Year 8·8

GENERATOR

PAB 2715834

A Form 8700 22 (3 84)

COPY 1 - Destination State - Mailed by TSD Facility

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
Box 2063
Harrisburg, PA 17120

ER-SWM-51:REV. 10/84

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2000-0404. Expires 7-31-86

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P·A·D·0·5·6·7·2·3·2·6 — Manifest Document No. 5·0·0·0·0

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
KOPPERS COMPANY INC P.O.BOX 189 MONTGOMERY, PA 17752-0189

4. Generator's Phone ( 717 ) 547-1651

A. State Manifest Document Number PAB 2715834

B. State Gen. ID PAD 056723265

5. Transporter 1 Company Name DART TRUCKING CO., INC

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

C. State Trans. ID PA-AH 0·2·1·9

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (800) 238-8357

E. State Trans. ID PA-AH

9. Designated Facility Name and Site Address
KOPPERS COMPANY INC P.O.BOX 160
GRENADA, MS 38960

10. US EPA ID Number M·S·D·0·0·7·0·2·7·5·4·3

F. Transporter's Phone ( )

G. State Facility's ID Not Required

H. Facility's Phone ( )

| 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-NON HAZARDOUS PROCESS WASTE N.O.S. LIQUID ORM-E NA 9188 (CONTAINS USED CREOSOTE) | 70 | DM | 4400 | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above

a. c.

b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 (b) of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: C. David Choate — Signature: [signature] — Month 0·2 Day 0·8 Year 8·8

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michael W. Smith — Signature: Michael W. Smith — Month 0·2 Day 0·8 Year 8·8

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: GARY E. MCCLELLAND — Signature: Gary E. McClelland — Month 0·2 Day 1·0 Year 8·8

GENERATOR

TRANSPORTER

FACILITY

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

PAB 2715834

EPA Form 8700-22 (3-84)

COPY 4 - TSD Facility - Retained by TSD Facility

S[illegible]WALD LABORATORIES
CHEM[illegible]L & BACTERIOLOGICAL ANALYSIS, [illegible]T. [illegible]39
1403-1405 W. FOURTH ST.
WILLIAMSPORT, PA. 17701
PHONE 717-326-4001

Lab. No. 88-01-18

**SAMPLE IDENTIFICATION:** Creosote

Koppers Inc.
PO Box 189
Montgomery, Pa. 17752

DATE COLLECTED: 1/5/88
DATE RECEIVED: 1/5/88
DATE REPORTED: 1/26/88

| ANALYSIS | | RESULTS |
|---|---|---|
| Arsenic | | < 0.0001 mg/g |
| Color | | Black |
| Odor | | Tar |
| Chromium | mg/g | 0.014 |
| Copper | " | 0.036 |
| Zinc | " | 0.207 |
| B.T.U. Per Pound | | 12672 |
| Boron | | 0.38 ppm |

Michael Shifflet per ls
Michael Shifflet

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P.O. Box 2063
Harrisburg, PA 17120

ER-SWM-51:REV. 10/84

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2000-0404. Expires 7-31-86

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: P·A·D·0·5·6·7·2·3·2·6·
Manifest Document No.: 5·0·0·0·0

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
KOPPERS COMPANY, INC., P.O. BOX 189, MONTGOMERY, PA. 17752-0189

4. Generator's Phone (717) 547-1651

A. State Manifest Document Number: PAB 2715845

B. State Gen. ID: PAD 056723265

5. Transporter 1 Company Name: DART TRUCKING CO., INC.

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

C. State Trans. ID: PA-AH 0·2·1·9

7. Transporter 2 Company Name:

8. US EPA ID Number:

D. Transporter's Phone (800) 238-8357

E. State Trans. ID: PA-AH

9. Designated Facility Name and Site Address
KOPPERS COMPNAY, INC., P.O. BOX 160
GRENADA, MS 38960

10. US EPA ID Number: M·S·D·0·0·7·0·2·7·5·4·3

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone ( )

| 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-Non HAZARDOUS PROCESS WASTE N.O.S. LIQUID ORM-R NA 9188 (CONTAINS USED CREOSOTE) | 70 | DM | 5200 | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above

a. c.
b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 (b) of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: THOMAS D. LOADMAN
Signature: Thomas D. Loadman
Month Day Year: 02 15 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Henry J. Reddick III
Signature: Henry J. Reddick III
Month Day Year: 02 15 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Month Day Year: 02 17 88

GENERATOR

TRANSPORTER

FACILITY

PAB 2715845

EPA Form 8700-22 (3-84)

COPY 4 - TSD Facility - Retained by TSD Facility

Copy 4 - TSD Facility - Retained by TSD Facility - Immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

EWALD LABORATORIES
CHEMICAL & BACTERIOLOGICAL ANALYSIS EST. 1939
1403-1405 W. FOURTH ST.
WILLIAMSPORT, PA. 17701
PHONE 717-326-4001

Lab. No. 88-01-18

**SAMPLE IDENTIFICATION:** Creosote

Koppers Inc.
PO Box 189
Montgomery, Pa. 17752

DATE COLLECTED: 1/5/88
DATE RECEIVED: 1/5/88
DATE REPORTED: 1/26/88

| ANALYSIS | | RESULTS |
|---|---|---|
| Arsenic | | < 0.0001 mg/g |
| Color | | Black |
| Odor | | Tar |
| Chromium | mg/g | 0.014 |
| Copper | " | 0.036 |
| Zinc | " | 0.207 |
| B.T.U. Per Pound | | 12672 |
| Boron | | 0.38 ppm |

Michael Shifflet per ls
Michael Shifflet

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P. O. Box 2063
Harrisburg, PA 17120

ER-SWM-51:REV. 6/87

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

Form approved.
OMB No. 2050-0039
Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P.A.D.0.5.6.7.2.3.2.6.5 — Manifest Document No. 1.00.0.9

2. Page 1 of 1

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

3. Generator's Name and Mailing Address
Koppers Co., Inc., P.O. Box 189, Montgomery, Pa. 17752

4. Generator's Phone ( 717 ) 547-1651

A. State Manifest Document Number PAB 5438370

B. State Gen. ID PAD 056723265

5. Transporter 1 Company Name
Dart Trucking Co., Inc.

6. US EPA ID Number 0.H.D.0.0.9.8.6.5.8.2.5

C. State Trans. ID PA-AH 0.2.1.9

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone ( 800 ) 238-8357

E. State Trans. ID PA-AH

9. Designated Facility Name and Site Address
Koppers Co., Inc., P.O. Box 160
Grenada, MS 38960

10. US EPA ID Number M.S.D.0.0.7.0.2.7.5.4.3

F. Transporter's Phone ( )

G. State Facility's ID Not Required

H. Facility's Phone ( )

| 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. N RQ-Non Hazardous Process Waste N.O.S. Liquid ORM-E NA 9188 (Contains Used Creosote) | 69 | DM | 4140 | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)

| | Haz. Code | Physical State | | Haz. Code | Physical State |
|---|---|---|---|---|---|
| a. | | | c. | | |
| b. | | | d. | | |

K. Handling Codes for Wastes Listed Above

a. c.

b. d.

15. Special Handling Instructions and Additional Information
WHEN HANDLING, WEAR PROTECTIVE EQUIPMENT SUCH AS IMPERVIOUS GLOVES AND EYE PROTECTION

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: T. D. LOADMAN — Signature: T. D. Loadman — Month 1 Day 1 Year 8 8

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Larry Allender — Signature: Larry Allender — Month 1 Day 1 Year 8 8

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: MONROE HARPER — Signature: Monroe Harper — Month 11 Day 17 Year 88

PAB 5438370

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

Copy 6 - TSD Facility: Retain This Copy

EWALD LABORATORIES
CHEMICAL & BACTERIOLOGICAL ANALYSIS EST. 1939
1403-1405 W. FOURTH ST.
WILLIAMSPORT, PA. 17701
PHONE 717-326-4001

Lab. No. 88-01-18

**SAMPLE IDENTIFICATION:** Creosote

Koppers Inc.
PO Box 189
Montgomery, Pa. 17752

DATE COLLECTED: 1/5/88
DATE RECEIVED: 1/5/88
DATE REPORTED: 1/26/88

| ANALYSIS | | RESULTS |
|---|---|---|
| Arsenic | | < 0.0001 mg/g |
| Color | | Black |
| Odor | | Tar |
| Chromium | mg/g | 0.014 |
| Copper | " | 0.036 |
| Zinc | " | 0.207 |
| B.T.U. Per Pound | | 12672 |
| Boron | | 0.38 ppm |

Michael Shifflet per ls
Michael Shifflet

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COPIES

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX 19276

E 562-0010
LPC 62 8/81

Print or type (Form designed for use on elite (12 pitch) typewriter) EPA Form 8700-22 (Rev. 9-86) Form Approved. OMB No. 2050-0039, Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 000819946 | Manifest Document No. 0001 | 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: Koppers Company, Inc.
P.O.Box 70
Carbondale, Illinois 62901

4. Generator's Phone ( 618 ) 457-4175

A. Illinois Manifest Document Number: IL 1844861

B. Illinois Generator's ID: 0 7 7 8 0 1 0 0 0 2

5. Transporter 1 Company Name: Dart Trucking Co., Inc.

6. US EPA ID Number: OHD 009865825

C. Illinois Transporter's ID: SWR 1 4 3 1

D. (800) 221-5337 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: Koppers Company, Inc.
Tie Plant, Route 68
Grenada, Mississippi 38960

10. US EPA ID Number: MSD 007027543

G. Illinois Facility's ID

H. Facility's Phone (601) 226-4594

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | Total Quantity | Unit Wt./Vol. | Waste No. |
|---|---|---|---|---|---|
| a. RQ Non-Hazardous process waste liquid NOS N.A. 9188 (contains used pentachlorophenol) | 83 | DM | 4 5 6 5 | 1 | EPA HW Number XX Authorization Number |
| b. 75200 $75.00 | | | | | EPA HW Number XX Authorization Number |
| c. 33000 | | | | | EPA HW Number XX Authorization Number |
| d. 41400 | | | | | EPA HW Number XX Authorization Number |

J. Additional Descriptions for Materials Listed Above: Contains spent (used) pentachlorophenol

K. Handling Codes for Wastes Listed Above in Item # 14: 1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information: Rubber gloves and eye protection to be worn when handling drums

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: Clark J. Mitchell | Signature: Clark J. Mitchell | Date: Month 02 Day 05 Year 88

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: William A. Huskaby | Signature: William A Huskaby | Date: Month 0 2 Day 0 5 Year 8 8

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: MONROE HARPER | Signature: Monroe Harper | Date: Month 02 Day 0 Year 9

ILLINOIS: 217 / 782-3637 *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX 19[illegible]

IL532-0610
LPC 62 8/81

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# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 000819946
Manifest Document No. 0001
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
Koppers Company, Inc.
P.O.Box 70
Carbondale, Illinois 62901

4. Generator's Phone ( 618 ) 457-4175

A. Illinois Manifest Document Number IL 1844861
B. Illinois Generator's ID 0 7 7 8 0 1 0 0 0 2

5. Transporter 1 Company Name: Dart Trucking Co., Inc.
6. US EPA ID Number: OHD 009865825
C. Illinois Transporter's ID 1431
D. ( 800 ) 221-8357 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
Koppers Company, Inc.
Tie Plant, Route 68
Grenada, Mississippi 38960
10. US EPA ID Number: MSD 007027543
G. Illinois Facility's ID
H. Facility's Phone ( 601 ) 226-4[illegible]

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. RQ Non-Hazardous process waste liquid NOS N.A. 9188 (contains used pentachlorophenol) | 83 | DM | 4565 | 1 | EPA HW Number XX; Authorization Number |
| b. 75280 | | | | | EPA HW Number XX; Authorization Number |
| c. 33880 | | | | | EPA HW Number XX; Authorization Number |
| d. 41400 | | | | | EPA HW Number XX; Authorization Number |

J. Additional Descriptions for Materials Listed Above
Contains spent (used) pentachlorophenol

K. Handling Codes for Wastes Listed Above In Item # 14
1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information
Rubber gloves and eye protection to be worn when handling drums

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: Clark J. Mitchell
Signature: Clark J. Mitchell
Date: Month Day Year 02 05 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: William A. Huckaby
Signature: William A Huckaby
Date: Month Day Year 0 2 0 5 8 8

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: MONROE HARPER
Signature: Monroe Harper
Date: Month Day Year 02 [illegible] 88

IN ILLINOIS: 217 / 782-3637 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV 7

GENERATOR COPY — PART 1-DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111½ Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of 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.

FACILITY COPY - PART 3

**Litton**
**Core Lab**

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OCT 2 1987

SEPTEMBER 29 1987 PAGE 1 OF 1

KOPPERS COMPANY INC.

P. O. BOX 270
CARBONDALE ILLINOIS 62901
MR. C. L. MITCHELL

JOB: W87419 57208
CHEMIST: TB Thomas W. Brashear
LOCATION: EVANSVILLE INDIANA

| TEST | SAMPLE NUMBER 419-1 8/24/87 |
|---|---|
| TOTAL COPPER MG/L | 10.0 |
| TOTAL CHROMIUM MG/L | 3.50 |
| TOTAL ARSENIC MG/L | .18 |
| TOTAL ZINC MG/L | 7.0 |
| TOTAL BORON MG/L | 1.26 |
| BTU BTU/LB. | 9681 |
| MOISTURE % | 18.3 |

The analyses, opinions or interpretations contained in this report are based upon observations and material supplied by the client for whose exclusive and confidential use this report has been made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. Core Laboratories, Inc. assumes no responsibility and makes no warranty or representations, express or implied, as to the productivity, proper operations, or profitableness however of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever.

2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX

IL532-0610
LPC 62 8/81

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Form Approved. OMB No. 2050-0039, Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ILD 000819946
Manifest Document No.: 000
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
Koppers Company, Inc.
P.O.Box 70
Carbondale, Illinois 62901

4. Generator's Phone ( 618 ) 457-4173

A. Illinois Manifest Document Number: IL 1844864
B. Illinois Generator's ID: 0778010002

5. Transporter 1 Company Name: Dart Trucking Co., Inc.
6. US EPA ID Number: OHD 009865825
C. Illinois Transporter's ID
D. ( ) 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
Koppers Company, Inc.
Tie Plant, Route 68
Grenada, Mississippi 38960
10. US EPA ID Number: MSD 007027543
G. Illinois Facility's ID
H. Facility's Phone ( 601 ) 226-4594

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. RQ Non-Hazardous process waste liquid NOS N. A. 9188 (contains used pentachlorophenol) | 87 | DM | 4785 | 1 | EPA HW Number XX; Authorization Number |
| b. | | | 46,150 | | EPA HW Number XX; Authorization Number |
| c. | | | Actual Wt. | | EPA HW Number XX; Authorization Number |
| d. | | | | | EPA HW Number XX; Authorization Number |

J. Additional Descriptions for Materials Listed Above
Contains spent (used) pentachlorophenol

K. Handling Codes for Wastes Listed Above in Item # 14
1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information
Rubber gloves and eye protection to be worn when handling drums

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: Clark J. Mitchell
Signature: Clark J. Mitchell
Date (Month Day Year): 03 08 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ronnie Coffey
Signature: Ronnie Coffey
Date (Month Day Year): 03 08 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Date (Month Day Year): 03 09 88

IN ILLINOIS: 217 / 782-3637 *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV 7

**GENERATOR COPY — PART 1-DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.**

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111½, Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of 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.

**FACILITY COPY - PART 3**

**Litton**

Core Lab

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OCT 2 1987

SEPTEMBER 29 1987 PAGE 1 OF 1

COPPERS COMPANY INC.

P. O. BOX 270
CARBONDALE ILLINOIS 62901
MR. C. L. MITCHELL

JOB: W87419 57208
CHEMIST: TB Thomas W. Brashear
LOCATION: EVANSVILLE INDIANA

| TEST | SAMPLE NUMBER | 419-1 8/24/87 |
|---|---|---|
| TOTAL COPPER MG/L | | 10.0 |
| TOTAL CHROMIUM MG/L | | 3.50 |
| TOTAL ARSENIC MG/L | | .18 |
| TOTAL ZINC MG/L | | 7.0 |
| TOTAL BORON MG/L | | 1.26 |
| BTU BTU/LB. | | 9681 |
| MOISTURE % | | 18.3 |

2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
P.O. BOX 1

IL532-0610
LPC 62 8/81

Please print or type. (Form designed for use on elite pica typewriter.) EPA Form 8700-22 (Rev. 9- Form Approved. OMB No. 2050-0039, Expires 9-30-88

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 000819946
Manifest Document No. 0001
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
Koppers Company, Inc.
P. O. Box 70
Carbondale, Il. 62901

4. Generator's Phone ( 618 ) 457-4175

A. Illinois Manifest Document Number IL 1844865
B. Illinois Generator's ID 0 7 7 8 0 1 0 0 0 2

5. Transporter 1 Company Name: Dart Trucking Co., Inc.
6. US EPA ID Number: OHD 009865825
C. Illinois Transporter's ID
D. ( 800 ) 426-0895 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
Koppers Company, Inc.
Tie Plant Route 68
Grenada, Mississippi 38960
10. US EPA ID Number: MSD 007027543
G. Illinois Facility's ID
H. Facility's Phone ( 601 ) 226-4504

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. RQ Non-Hazardous process waste liquid NOS N. A. 9188 (contains used pentachlorophenol) | 51 | DM | 2805 | 1 | EPA HW Number XX Authorization Number |
| b. Non-hazardous process waste (creosote Sludge) | 35 | DM | 550 | 1 | EPA HW Number XX Authorization Number |
| c. | | | 33,550 | | EPA HW Number XX Authorization Number |
| d. Actual Wt = 30,530 # | | | | | EPA HW Number XX Authorization Number |

J. Additional Descriptions for Materials Listed Above
contains spent (used) pentachlorophenol
Deer pit sludge

K. Handling Codes for Wastes Listed Above In Item # 14
1 = Gallons 2 = Cubic Yards
1 gal. = 10 lbs.

15. Special Handling Instructions and Additional Information
Rubber gloves and eye protection to be worn when handling drums

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: Gerald Hagler
Signature: Gerald Hagler
Date: Month 04 Day 15 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Joe Renfro
Signature: Joe Renfro
Date: Month 04 Day 15 Year 88

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: GARY E. MCCLELLAND
Signature: Gary E. McClelland
Date: Month 04 Day 18 Year 88

IN ILLINOIS: 217 / 782-3637 *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV 7

GENERATOR COPY — PART 1-DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111½, Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of 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.

FACILITY COPY - PART 3

Litton
Core Lab

RECEIVED
OCT 2 1987

SEPTEMBER 29 1987 PAGE 1 OF 1

KOPPERS COMPANY INC.

P. O. BOX 270
CARBONDALE ILLINOIS 62901
MR. C. L. MITCHELL

JOB: W87419 57208
CHEMIST: TB Thomas W. Brashear
LOCATION: EVANSVILLE INDIANA

| TEST | SAMPLE NUMBER | 419-1 8/24/87 |
|---|---|---|
| TOTAL COPPER MG/L | | 10.0 |
| TOTAL CHROMIUM MG/L | | 3.50 |
| TOTAL ARSENIC MG/L | | .18 |
| TOTAL ZINC MG/L | | 7.0 |
| TOTAL BORON MG/L | | 1.26 |
| BTU BTU/LB. | | 9681 |
| MOISTURE % | | 18.3 |

| Violation | Potential For Harm | Extent of Deviation | Penalty Chosen | Adjustment | Economic Benefit | Total |
|---|---|---|---|---|---|---|
| 1. 6 Drums U051 longer than 90 Day storage | Minor | Major | $2,999 | 750 | - 0 - | 3,749 |
| 2. Well R-1 to be plugged and re-drilled properly | Minor | Major | 2,999 | - 0 - | 480 | 3,479 |
| 3. Disposing of Ash from burning of K001 Waste from Oil/water Separator | Moderate | Major | 10,999 | 2,750 | 48,190 | 61,939 |
| 4. Land-Ban Violation | Moderate | Major | 10,999 | - 0 - | - 0 - | 10,999 |
| 5. Failure to Analyze for Tox, Appendix III. | Moderate | Moderate | 6,500 | - 0 - | - 0 - | 6,500 |
| 6. Run-on/Run-off Control at Boiler Ash Landfarm | Minor | Minor | 250 | 63 | - 0 - | 313 |
| 7. Failure to Properly notify of G.W. contamination at Boiler Ash Landfarm and Surface Impoundment | Major | Moderate | 17,500 | - 0 - | - 0 - | 17,500 |
| 8. | | | | | | |
| TOTALS | | | 52,246 ~~52,496~~ A | 3,563 B | 48,670 C | 104,729 74,493 (~~76,700~~) @50% |

PUNITIVE CALCULATED : $52,246

ECONOMIC BENEFIT : $48,670

$100,916

(50% of Punitive) + ECONOMIC BENEFIT

$26,123 + 48,670 = $74,793

NATIONAL 42-182 100 SHEETS made in U.S.A.

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171

November 10, 1988

CERTIFIED MAIL NO. P 962 284 477

Mr. J. R. Batchelder
Vice President & Manager
Technical & Environmental Services
Koppers Company, Inc.
436 Seventh Avenue
Pittsburg, Pennsylvania 15219

Dear Mr. Batchelder:

In order to settle certain environmental issues regarding Koppers Company, Inc., Tie Plant, Mississippi, you have agreed to the conditions of Administrative Order No. 1478-88, which is enclosed.

If you have questions about this matter, please contact Mr. Steve Spengler at telephone #601/961-5171.

Sincerely,

Charles H. Chisolm
Bureau Director

CHC:mh

Enclosure

BEFORE THE MISSISSIPPI COMMISSION
ON NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL
JACKSON, MISSISSIPPI
COUNTY OF HINDS

IN THE MATTER OF:

MISSISSIPPI COMMISSION ON
NATURAL RESOURCES

COMPLAINANT

VS.

ORDER NO. 1478 881

Koppers Company, Inc.
MSD 007027543

RESPONDENT

AGREED ORDER

COMES NOW THE Mississippi Commission on Natural Resources, Complainant, and Koppers Company, Inc., Respondent, in the above referenced administrative action and would show forth as follows:

1. On October 7, 1988, Respondent was contacted by Complainant and notified of Complainant's intent to cite Respondent for a certain violation and/or violations of requirements set forth in Mississippi Hazardous Waste Management Regulations (MHWMR) Part 262 and Part 265, a copy of which is attached hereto and incorporated herein by reference; said violations being as follows:

a. Respondent did not construct and maintain a storm water run-on/run-off management system or provide means to control the wind dispersal of hazardous waste ash which had been landfilled at its "boiler ash landfarm" as required by MHWMR 265.302.

b. Respondent failed to provide adequate security at the "boiler ash landfarm" in that the gate to the unit did not have a lock on it as required by MHWMR 265.14.

c. Respondent stored at its designated less than ninety (90) day hazardous waste container/drum storage building six (6) drums of the listed hazardous waste U051 which did not have accumulation dates affixed to them as required by MHWMR 262.34.

d. Respondent stored at its less than ninety (90) day container/drum storage building six (6) drums of the listed hazardous waste U051 for longer than ninety (90) days in violation of MHWMR 262.34.

and,

2. Respondent submitted a letter to Complainant, dated September 22, 1988, which outlined actions that have been taken to bring the facility into compliance with respect to the violations cited in items a., b., and c. of paragraph 1.

and,

3. Complainant and Respondent do hereby agree, in lieu of a formal filing of complaint by Complainant, to enter into this Agreed Order wherein Respondent agrees to pay and Complainant agrees to accept, the sum of $6,000.00 as a full and complete settlement thereof, said sum to be paid in its entirety on or before November 30, 1988.

Dr. pd Nov 28, 1988

and,

4. Respondent further understands and agrees that, as part of the above referenced settlement, Respondent shall properly manage its less than ninety (90) day hazardous waste container/drum storage building in accordance with the requirements of MHWMR 262.34 and otherwise comply with the requirements set forth in MHWMR Part 262 and Part 265.

5. Respondent understands and agrees that it is fully entitled to an evidentiary hearing pursuant to Sections 49-17-31 and 49-17-41 of the Mississippi Code Annotated, and that it agrees to the above referenced settlement only after having been fully informed of its right to said hearing; and

6. Respondent understands and agrees that this settlement agreement in no way is an admission of liability on its part, and is entered into for the sole purpose of causing a swift resolution of this administrative matter.

SO ORDERED, this the 9th day of November, 1988.

ON

MISSISSIPPI COMMISSION
NATURAL RESOURCES

BY: J. I. Palmer, Jr.
J. I. PALMER, JR.
EXECUTIVE DIRECTOR

AGREED to this the 7th day of November, 1988.

RESPONDENT

Vice President & Manager
Technical & Environmental Services

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171

November 10, 1988

CERTIFIED MAIL NO. P 962 284 477

Mr. J. R. Batchelder
Vice President & Manager
Technical & Environmental Services
Koppers Company, Inc.
436 Seventh Avenue
Pittsburg, Pennsylvania 15219

Dear Mr. Batchelder:

In order to settle certain environmental issues regarding Koppers Company, Inc., Tie Plant, Mississippi, you have agreed to the conditions of Administrative Order No. 1478-88, which is enclosed.

If you have questions about this matter, please contact Mr. Steve Spengler at telephone #601/961-5171.

Sincerely,

Charles H. Chisolm
Bureau Director

CHC:mh

Enclosure

BEFORE THE MISSISSIPPI COMMISSION
ON NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL
JACKSON, MISSISSIPPI
COUNTY OF HINDS

IN THE MATTER OF:

MISSISSIPPI COMMISSION ON
NATURAL RESOURCES

COMPLAINANT

VS.

ORDER NO. 1473 881

Koppers Company, Inc.
MSD 007027543

RESPONDENT

AGREED ORDER

COMES NOW THE Mississippi Commission on Natural Resources, Complainant, and Koppers Company, Inc., Respondent, in the above referenced administrative action and would show forth as follows:

1. On October 7, 1988, Respondent was contacted by Complainant and notified of Complainant's intent to cite Respondent for a certain violation and/or violations of requirements set forth in Mississippi Hazardous Waste Management Regulations (MHWMR) Part 262 and Part 265, a copy of which is attached hereto and incorporated herein by reference; said violations being as follows:

a. Respondent did not construct and maintain a storm water run-on/run-off management system or provide means to control the wind dispersal of hazardous waste ash which had been landfilled at its "boiler ash landfarm" as required by MHWMR 265.302.

b. Respondent failed to provide adequate security at the "boiler ash landfarm" in that the gate to the unit did not have a lock on it as required by MHWMR 265.14.

c. Respondent stored at its designated less than ninety (90) day hazardous waste container/drum storage building six (6) drums of the listed hazardous waste U051 which did not have accumulation dates affixed to them as required by MHWMR 262.34.

d. Respondent stored at its less than ninety (90) day container/drum storage building six (6) drums of the listed hazardous waste U051 for longer than ninety (90) days in violation of MHWMR 262.34.

and,

2. Respondent submitted a letter to Complainant, dated September 22, 1988, which outlined actions that have been taken to bring the facility into compliance with respect to the violations cited in items a., b., and c. of paragraph 1.

and,

3. Complainant and Respondent do hereby agree, in lieu of a formal filing of complaint by Complainant, to enter into this Agreed Order wherein Respondent agrees to pay and Complainant agrees to accept, the sum of $6,000.00 as a full and complete settlement thereof, said sum to be paid in its entirety on or before November 30, 1988.

and,

4. Respondent further understands and agrees that, as part of the above referenced settlement, Respondent shall properly manage its less than ninety (90) day hazardous waste container/drum storage building in accordance with the requirements of MHWMR 262.34 and otherwise comply with the requirements set forth in MHWMR Part 262 and Part 265.

5. Respondent understands and agrees that it is fully entitled to an evidentiary hearing pursuant to Sections 49-17-31 and 49-17-41 of the Mississippi Code Annotated, and that it agrees to the above referenced settlement only after having been fully informed of its right to said hearing; and

6. Respondent understands and agrees that this settlement agreement in no way is an admission of liability on its part, and is entered into for the sole purpose of causing a swift resolution of this administrative matter.

SO ORDERED, this the 9th day of November, 1988.

ON

MISSISSIPPI COMMISSION
NATURAL RESOURCES

BY: J. T. Palmer, Jr.
J. T. PALMER, JR.
EXECUTIVE DIRECTOR

AGREED to this the 7th day of November, 1988.

RESPONDENT
Vice President & Manager
Technical & Environmental Services

BEFORE THE MISSISSIPPI COMMISSION
ON NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL
JACKSON, MISSISSIPPI
COUNTY OF HINDS

IN THE MATTER OF:

MISSISSIPPI COMMISSION ON
NATURAL RESOURCES

COMPLAINANT

VS.

ORDER NO. 1478 881

Koppers Company, Inc.
MSD 007027543

RESPONDENT

AGREED ORDER

COMES NOW THE Mississippi Commission on Natural Resources, Complainant, and Koppers Company, Inc., Respondent, in the above referenced administrative action and would show forth as follows:

1. On October 7, 1988, Respondent was contacted by Complainant and notified of Complainant's intent to cite Respondent for a certain violation and/or violations of requirements set forth in Mississippi Hazardous Waste Management Regulations (MHWMR) Part 262 and Part 265, a copy of which is attached hereto and incorporated herein by

d. Respondent stored at its less than ninety (90) day container/drum storage building six (6) drums of the listed hazardous waste U051 for longer than ninety (90) days in violation of MHWMR 262.34.

and,

2. Respondent submitted a letter to Complainant, dated September 22, 1988, which outlined actions that have been taken to bring the facility into compliance with respect to the violations cited in items a., b., and c. of paragraph 1.

and,

3. Complainant and Respondent do hereby agree, in lieu of a formal filing of complaint by Complainant, to enter into this Agreed Order wherein Respondent agrees to pay and Complainant agrees to accept, the sum of $6,000.00 as a full and complete settlement thereof, said sum to be paid in its entirety on or before November 30, 1988.

and,

4. Respondent further understands and agrees that, as part

6. Respondent understands and agrees that this settlement agreement in no way is an admission of liability on its part, and is entered into for the sole purpose of causing a swift resolution of this administrative matter.

SO ORDERED, this the 9th day of November, 1988.

ON

MISSISSIPPI COMMISSION
NATURAL RESOURCES

BY: J. I. Palmer, Jr.
J. I. PALMER, JR.
EXECUTIVE DIRECTOR

AGREED to this the 7th day of November, 1988.

RESPONDENT

Vice President & Manager

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers, Grenada, MS

Regulation Violated 268.7

Assessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Moderate
2. Extent of Deviation: Major
3. Matrix Cell Range: 8,000-10,999

   Penalty Amount Chosen: 10,999

   Justification for Penalty Amount Chosen: Upper Point

4. Per-Day Assessment: NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | |
| 2. Degree of willfulness and/or negligence: | NA | |
| 3. History of noncompliance: | NA | |
| 4. Other unique factors: | NA | |
| 5. Justification for Adjustments: | | |

* Percentaged adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $10,999 |
| 7. Number of Days of Violation: | - |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | - |
| 9. Economic Benefit of Noncompliance: | 19,575 |
| Justification: | *See Attached |
| 10. Total (Lines 8 + 9, Part II): | 30,574 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $30,574 |

Koppers
Grenada, Mississippi
Penalty Calculations

MHWMR 268.7 - Ash generated land disposed without analysis. Potential for harm - Major - Since prior wastes of the same type were incinerated in the boiler and disposed of as hazardous waste, and since the material received from off site contained K001 characteristic hazardous waste, the possibility exists for contamination of the landfill used for disposal. Extent of deviation - Major - regulations and past history at facility should have dictated analysis of waste.

Economic Benefit Calculations

| | |
|---|---|
| Disposal Costs @ 800.00/Ton x 38.6 Tons = | $30,880.00 |
| Disposal Costs @ 125.00/Ton x 41.1 Tons = | 5,138.00 |
| | $36,018.00 |
| Loading Costs | 325.00 |
| | $36,343.00 = Avoided Costs |

36,343 x 0.54 = $19,625 Economic Benefit

Comment: Negotiations with the facility resulted in a settlement of 50% of the calculated non-economic benefit penalty for a total of $25,075.

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers, Grenada, MS

Regulation Violated MHWMR 262.12(c)

Assessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Moderate
2. Extent of Deviation: Major
3. Matrix Cell Range: 8,000-10,999

   Penalty Amount Chosen: $10,999

   Justification for Penalty Amount Chosen:

4. Per-Day Assessment: NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | |
| 2. Degree of willfulness and/or negligence: | NA | — |
| 3. History of noncompliance: | 25% | $2,750 |
| 4. Other unique factors: | NA | |
| 5. Justification for Adjustments: | - 1987 - See Comments | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $13,749 |
| 7. Number of Days of Violation: | NA |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | NA |
| 9. Economic Benefit of Noncompliance: | -0- |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | $13,749 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | NA |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $13,749 |

Koppers
Violations - Penalty
Calculations

1.A. MHWMR 262.12(c) - Receipt of hazardous waste incorrectly classified and burned in facility boilers. Ash generated was not treated as a hazardous waste and was sent to a municipal landfill facility (Grenada Co. Landfill without proper I.D. No.)

B. Seriousness: failure to treat boiler ash material as hazardous waste: Potential for harm - Moderate - Hazardous waste ash generated was dumped in a landfill not permitted to handle hazardous waste. The violation could have serious impact on human health and the environment. Extent of deviation - Major - substantial noncompliance from the regulations are noted since neither incoming waste nor ash waste generated from burning were treated as hazardous waste. History of noncompliance - In 1987, similar material was burned in boilers; this ash became the basis for the boiler ash landfarm RCRA unit.

Comment: Negotiated settlement resulted in a revised penalty of 50% of calculated amount or $6,875.

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers, Grenada, MS

Regulation Violated Permit Condition IV.C.3.

Assessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor
2. Extent of Deviation: Major
3. Matrix Cell Range: 1500-2999

   Penalty Amount Chosen: $2,250

   Justification for Penalty Amount Chosen: Lower Point
4. Per-Day Assessment: NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | |
| 2. Degree of willfulness and/or negligence: | NA | |
| 3. History of noncompliance: | NA | |
| 4. Other unique factors: | NA | |
| 5. Justification for Adjustments: | | |

*Percentaged adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $2,250 |
| 7. Number of Days of Violation: | NA |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | NA |
| 9. Economic Benefit of Noncompliance: | 480 |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | $2,730 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | - |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $2,750 |

Koppers
Grenada, Mississippi
Penalty Calculation

Permit Condition IV.C.3. - Well R-1, improperly constructed, to be replaced with new well. Potential for harm - Minor - well is upgradient and used in determining statistical analysis. Extent of deviation - Major - Permit explicitly required reconstruction within 30 days of effective date of permit.

Economic Benefit:

Delayed Costs: Cost of Well (COW)
Cost of Plugging R-1 = 4,000

Avoided Cost = 0
IRS Interest Rate 0.12
Assume T = 0.46

Economic Benefit = Avoided Cost (1-T) + Delayed Cost x 0.12
= 0 + (4000)(0.12) = 480.00

Comment: Negotiations with the facility led to a settlement of 50% of the calculated non-economic benefit penalty plus the economic benefit penalty for a total of $1,605.

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

**Company Name:** Koppers, Grenada, MS

**Regulation Violated** MHWMR 262.34

**Assessments for each violation should be determined on separate worksheets and totalled.**

**(If more space is needed, attach separate sheet.)**

### Part I - Seriousness of Violation Penalty

1. **Potential for Harm:** Minor
2. **Extent of Deviation:** Major
3. **Matrix Cell Range:** $1,500 - 2,999

   **Penalty Amount Chosen:** 2,250

   **Justification for Penalty Amount Chosen:** Midpoint

4. **Per-Day Assessment:** NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | NA |
| 2. Degree of willfulness and/or negligence: | NA | NA |
| 3. History of noncompliance: | NA | NA |
| 4. Other unique factors: | NA | NA |
| 5. Justification for Adjustments: | | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $2,250 |
| 7. Number of Days of Violation: | NA |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | NA |
| 9. Economic Benefit of Noncompliance: | NA |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | $2,250 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | NA |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $2,250 |

Koppers
Grenada, Mississippi
Penalty Calculation

MHWMR 262.34 - Facility stored six drums of U051 hazardous waste at less than 90 day container storage area for greater than 90 days. Potential for harm - Minor - since material was in approved containers and labeled as hazardous waste, potential for release and endangerment to environment or human health, is minor. Extent of deviation - Major - apparently the 90 day storage limit had been violated since some drums had been in storage for over a year. All drums apparently met labeling regulations.

Comment: Negotiations with the facility led to a settlement of 50% of the calculated valve or $1,125.00.

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

**Company Name:** Koppers, Grenada, MS

**Regulation Violated** MHWMR 265.302

**Assessments for each violation should be determined on separate worksheets and totalled.**

**(If more space is needed, attach separate sheet.)**

### Part I - Seriousness of Violation Penalty

1. **Potential for Harm:** Minor
2. **Extent of Deviation:** Minor
3. **Matrix Cell Range:** 100-499

   **Penalty Amount Chosen:** $250.00

   **Justification for Penalty Amount Chosen:** Midpoint

4. **Per-Day Assessment:** NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | NA |
| 2. Degree of willfulness and/or negligence: | NA | NA |
| 3. History of noncompliance: | 25% | 63 |
| 4. Other unique factors: | NA | NA |
| 5. Justification for Adjustments: | | |

*Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | 313 |
| 7. Number of Days of Violation: | NA |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | NA |
| 9. Economic Benefit of Noncompliance: | NA |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | 313 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | NA |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | 313 |

Koppers
Grenada, Mississippi
Penalty Calculation

MHWMR 265.302 - Facility has failed to provide adequate run-on/run-off and wind dispersal control systems. Potential for harm - Minor - holes in the cover as well as dirt placed on top of the pile provides an opportunity for exposure of contaminants to humans and animals. Extent of deviation - Minor - film mostly intact and run-on/run-off system in need of minor repair. Historical violation for maintaining adequate wind dispersal control noted.

Comment: Negotiations with the facility led to a settlement of 50% of the calculated total or $157.00.

# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

**Company Name:** Koppers, Grenada, MS

**Regulation Violated** MHWMR 265.93

**Assessments for each violation should be determined on separate worksheets and totalled.**

**(If more space is needed, attach separate sheet.)**

### Part I - Seriousness of Violation Penalty

1. **Potential for Harm:** Major
2. **Extent of Deviation:** Moderate
3. **Matrix Cell Range:** $15,000 - $19,999

   **Penalty Amount Chosen:** $15,000

   **Justification for Penalty Amount Chosen:** Lowpoint
4. **Per-Day Assessment:** NA

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | NA | |
| 2. Degree of willfulness and/or negligence: | NA | |
| 3. History of noncompliance: | NA | |
| 4. Other unique factors: | NA | |
| 5. Justification for Adjustments: | | |

* Percentaged adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $15,000 |
| 7. Number of Days of Violation: | NA |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | NA |
| 9. Economic Benefit of Noncompliance: | NA |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | $15,000 |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | NA |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $15,000 |

Koppers
Grenada, Mississippi
Penalty Calculation

MHWMR 265.93 - Facility has failed to perform required statistical analysis at the surface impoundment and has failed to notify the Director of the existence of groundwater contamination. Also facility has failed to notify Director of the existence of groundwater contamination at the boiler ash landfarm. Potential for harm - Major - Since a plan of corrective action cannot be implemented until assessment of the extent of contamination, and since contaminants continue to migrate pending assessment, and since migration may cause harm to the environment and human health, the potential for harm is considered Major. Extent of deviation - Moderate - violator submitted reports on groundwater monitoring in a timely manner - many other requirements met. Deviation from the regulations were moderately disregarded.

Comment: Negotiations with the facility resulted in a settlement of 50% of the calculated amount or $7,500.

Memo

To: Koppers Compliance File  Date: 10-7-88

From: Dave Bachelman

Concerning: Violations and calculated fines stemming from a CEI conducted on 5-16-88.

Meeting Attendees:

Robert Anderson, Keystone
Dave King, Keystone
Rock Clayton, Koppers
Dave Bachelman, PA DER
Steve Spergel, PA DER

A meeting of the above parties was held on 10-7-88 to address certain violations and calculated penalties stemming from a CEI conducted on 5-16-88. Facility personnel were informed that the penalties would sum a total of $10,000.00 in fines; broken down as follows:

$6500.00 - No run-on/run-off control disposal at boiler ash landfill
$2250.00 - Storage of drums for > 90 days,
$1000.00 - No accumulation dates on drums,
$250.00 - No locking gate at boiler ash landfill.

Total: $10,000.00

Facility was informed that Bureau would only seek 60% in an Agreed Order.

Memo (Cont 10-10-88)

Facility agreed to provide documentation that original Part A storage area in vicinity of process tanks was never actively used. Facility also agreed to submit plan for decontamination of < 90 storage area near boiler feed hopper.

I questioned Bob Anderson concerning apparent contamination of groundwater at spreyfield from 2nd quarterly monitoring results. He did not offer any explanation for the circumstances, i.e. the Impending Commission hearing on the regulation of the spreyfield.

DJC

Failure to manage [illegible] bottom ash [illegible] landfill.
No run-on/run-off control [illegible]



## IX. APPENDIX

### PENALTY COMPUTATION WORKSHEET

Company Name: Toppers Company, Inc.

Regulation Violated MHWMR Part 265 Subpart N (265.302)

Asessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

**Part I - Seriousness of Violation Penalty**

1. Potential for Harm: Moderate
2. Extent of Deviation: Moderate
3. Matrix Cell Range: $5,000 - $7,999

   Penalty Amount Chosen: $6500.00

   Justification for Penalty Amount Chosen: Midpoint of range.

4. Per-Day Assessment: $6500.00

**Part II - Penalty Adjustments**

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | N/A | |
| 2. Degree of willfulness and/or negligence: | N/A | |
| 3. History of noncompliance: | N/A | |
| 4. Other unique factors: | N/A | |

5. Justification for Adjustments:

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $6500.00 |
| 7. Number of Days of Violation: | N/A |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | N/A |
| 9. Economic Benefit of Noncompliance: | N/A |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | N/A |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | N/A |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $6500.00 |

Storage of containers for longer than 90 days



# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers Company, Inc.

Regulation Violated MHWMR 262.34

Asessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor
2. Extent of Deviation: Major
3. Matrix Cell Range: $1500 - $2,999

   Penalty Amount Chosen: $2250.00

   Justification for Penalty Amount Chosen: Midpoint of range.

4. Per-Day Assessment: $2250.00

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | N/A | |
| 2. Degree of willfulness and/or negligence: | N/A | |
| 3. History of noncompliance: | N/A | |
| 4. Other unique factors: | N/A | |
| 5. Justification for Adjustments: | | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $2250.00 |
| 7. Number of Days of Violation: | N/A |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | N/A |
| 9. Economic Benefit of Noncompliance: | N/A |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | N/A |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | N/A |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $2250.00 |

No accumulation [illegible] 6 drums, U031



# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers Company, Inc.

Regulation Violated MHWMR 262.34

Asessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor
2. Extent of Deviation: Moderate
3. Matrix Cell Range: $500 - $1499

   Penalty Amount Chosen: $1000.00

   Justification for Penalty Amount Chosen: midpoint of range.
4. Per-Day Assessment: $1000.00

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | N/A | |
| 2. Degree of willfulness and/or negligence: | N/A | |
| 3. History of noncompliance: | N/A | |
| 4. Other unique factors: | N/A | |
| 5. Justification for Adjustments: | | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $1000.00 |
| 7. Number of Days of Violation: | N/A |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | N/A |
| 9. Economic Benefit of Noncompliance: | N/A |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | N/A |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | N/A |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $1000.00 |

Inadequate Security at boilerwash landfill



# IX. APPENDIX

## PENALTY COMPUTATION WORKSHEET

Company Name: Koppers Company, Inc.

Regulation Violated MHWMR 265.14

Asessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

### Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor
2. Extent of Deviation: Minor
3. Matrix Cell Range: $100 - $499

   Penalty Amount Chosen: $250.00

   Justification for Penalty Amount Chosen: Midpoint of range.

4. Per-Day Assessment: $250.00

### Part II - Penalty Adjustments

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | | |
| 2. Degree of willfulness and/or negligence: | | |
| 3. History of noncompliance: | | |
| 4. Other unique factors: | | |

5. Justification for Adjustments:

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $250.00 |
| 7. Number of Days of Violation: | N/A |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | N/A |
| 9. Economic Benefit of Noncompliance: | N/A |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | N/A |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | N/A |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $250.00 |

Did not close original drum storage area or < 90 day drum storage area.

Note: Not assessed - facility adequately explained. Bureau agrees that no fine should be assessed.

10-10-88 DJB



## IX. APPENDIX

### PENALTY COMPUTATION WORKSHEET

Company Name: Koppers Company, Inc.

Regulation Violated MHWMR Part 265 - Subpart G + 262.34

Asessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

**Part I - Seriousness of Violation Penalty**

1. Potential for Harm: Minor
2. Extent of Deviation: Moderate
3. Matrix Cell Range: $500 - $1499

   Penalty Amount Chosen: $1000.00

   Justification for Penalty Amount Chosen: Midpoint of range.
4. Per-Day Assessment: $1000.00

**Part II - Penalty Adjustments**

| | Percentage Change* | Dollar Amount |
|---|---|---|
| 1. Good faith efforts to comply/lack of good faith: | N/A | |
| 2. Degree of willfulness and/or negligence: | N/A | |
| 3. History of noncompliance: | N/A | |
| 4. Other unique factors: | N/A | |
| 5. Justification for Adjustments: | | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

| | |
|---|---|
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II): | $1000.00 |
| 7. Number of Days of Violation: | N/A |
| 8. Multi-day Penalty (Number of days x Line 6, Part II): | N/A |
| 9. Economic Benefit of Noncompliance: | N/A |
| Justification: | |
| 10. Total (Lines 8 + 9, Part II): | N/A |
| 11. Ability to Pay Adjustment: | |
| Justification for Adjustment: | N/A |
| 12. Total Penalty Amount (must not exceed $25,000 per day of violation): | $1000.00 |

Justification for Gravity Based Penalty
Koppers Company, Inc. (Tie Plant)

Violation:

1.) MHWMR 265.302 - The facility failed to provide control of run-on run-off and wind dispersal of ash at boiler ash "landfarm" (landfill).

Potential for Harm: Moderate - Analysis of ash showed no or only trace levels of K001 constituents. Analysis of cinders, however, showed fairly significant levels of 6 K001 constituents. Failure to provide run-on/run-off controls could result in the leaching of these constituents which would result in the contamination of underlying soils and groundwater. Failure to control wind dispersal has resulted in the ash being scattered locally about the site.

Extent of Deviation: Moderate - The facility failed to provide for run-on/run-off control and wind dispersal. The facility did however, cease using the boiler ash landfarm when instructed to do so by the state and did install a groundwater monitoring system.

* 2.) MHWMR Part 265 - Subpart G and 262.34 - The facility listed on their Part A a container storage area located inside a concrete wall that surrounds the creosote process tanks. This area was repeatedly not used however the facility has not documented this or closed the unit. The facility used a concrete pad located next to the boiler feed hopper as a less than 90 day container storage area. This area was never documented as having been closed or decontaminated.

Potential for Harm: Minor - The area inside the concrete wall surrounding the process tanks was never actively used by the facility and therefore a failure to close this area does not pose a threat to human health or the environment. The concrete pad adjacent to the boiler feed hopper was operated as a less than 90 day container storage area, prior to October of 1986, and was not properly closed or decontaminated. This area is still used to store non-hazardous creosote and pentachlorophenol fuel additives. While these additives are not listed as hazardous wastes they consist of the same essential constituents as F001 U051 and F027. Since these additives are still being stored on this pad, the failure to close or decontaminate does not pose any additional threat to human health or the environment.

Extent of Deviation: Moderate - The facility failed to document that the interim status container storage area was never actively used or to close this unit. The facility failed to close + decontaminate the less than 90 day storage area after they ceased storing hazardous wastes. Both of these violations represent fairly significant deviations from the regulations however the interim status storage area was apparently never used + the less than 90 day storage pad is still storing materials which essentially contain the same constituents as the hazardous waste which was previously stored there.

3.) MHWMR 262.34 - Facility failed to affix accumulation dates on six drums in their current less than 90 day storage building.
Potential for Harm: Minor - The drums were properly sealed, labeled and in a designated hazardous waste container storage building and therefore pose little potential for harm to human health or the environment.
Extent of Deviation: Moderate - The drums were stored in a less than 90 day container storage building. The only way to determine if the facility is adhering to the less than 90 day restriction is by the use of accumulation dates which are clearly marked on each drum.

4.) MHWMR 265.14 - Facility did not maintain proper security of the boiler ash landfarm. The gate did not have a lock on it and the fence was inadequate. Subsequent correspondence with the facility showed that Chuck Estes approved the fence design of 3 strands of barb wire.
Potential for Harm: Minor - The fence and gate were in good condition and signs were posted. They posed little potential for accidental entry.
Extent of Deviation: Minor - The unit gate was not locked as required, however, appropriate signs were posted. The fence is inadequate however it was apparently approved by the Bureau.

5.) MHWMR 262.34 - Facility stored drums for longer than 90 days in their less than 90 day container storage area.

Potential for Harm, Minor - The drums were properly labeled and in the designated container storage building and therefore posed little threat to human health or the environment.

Extent of Deviation: Major - The facility significantly deviated from this regulation by storing these 6 drums for longer than 90 days in a less than 90 day container storage area.

FILE COPY

October 26, 1988

CERTIFIED MAIL NO. P 962 285 138

Mr. J. R. Batchelder
Vice President and Manager
Technical and Environmental Services
Tar and Wood Products Sector
Koppers Company, Inc.
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219

Dear Mr. Batchelder:

Re: Agreed Order
Koppers Company, Inc.
Tie Plant, Mississippi
MSD007027543

Enclosed is an Agreed Order which addresses earlier RCRA violations at the above referenced facility. Please review this document and if the wording and conditions contained within it are agreeable to Koppers Company, Inc., have it signed and dated by the responsible company official and return to my attention at the above address by November 9, 1988. If the wording or conditions are not agreeable to Koppers Company, Inc., please contact me at your earliest convenience so that we can discuss any changes that may be necessary.

If you should have any questions or if you should require any additional information, please contact me at (601) 961-5171.

Sincerely,

Wm. Stephen Spengler, P.E., Coordinator
TSD Branch, Hazardous Waste Division

WSS:lr

Facility Name: Koppers
ID [redacted]: MSD007027543
Inspector: Diane Bohlmann
Date: 12-12-88

DRAFT
RCRA LAND RESTRICTION
TREATMENT, STORAGE, AND DISPOSAL REQUIREMENTS CHECKLIST

I. FACILITY IDENTIFICATION

A. Facility Name: Koppers Co., Inc.

B. Street (or other identifier): P.O. Box 160

C. City: Tie Plant

D. State: MS

E. Zip Code: 38960

F. County Name: Grenada

G. Nature of business; identification of industrial and waste management operations; relevant SIC codes: Wood treater using creosote + pentachlorophenol.

H. EPA ID #: MSD007027543

I. Facility Contact (Name and Phone Number): J.D. "Rock" Clayton, Plant Manager, 601-226-4584

II.A. For onsite facilities, complete the generator checklist

Comments

B. General Facility Standards

1. General

a. Does the facility conduct waste analysis (total and TCLP) on-site or through a commercial laboratory?
Commercial Laboratory

b. Describe the frequency of sampling conducted by the facility.
As necessary to characterize a particular waste stream.

This is for wastes received at site

2. Treatment Facilities N/A

a. Has the treatment facility revised its waste analysis plan [§268.7(b)] to meet the requirements of §264.13 or §265.13? ___Yes ___No*

(i) Is the treatment facility conducting TCLP tests for wastes specified in Appendix A (i.e., those prohibited wastes subject to treatment standards expressed as waste extracts) per 286.7(b)(i)? ___Yes ___No*

* A potential violation is indicated

Inspector: Dave Bockelmann
D[illegible] 12-12-88

Comments

(ii) Is the treatment facility using the paint filter test for the California waste residues [§268.7(b)(ii)]? ___Yes ___No

(iii) Is the treatment facility testing the pH of California waste residues? ___Yes ___No

(iv) Is the treatment facility testing concentrations (not extracts) in the waste residues for prohibited wastes with established treatment standards expressed as waste concentrations [§268.7(b)(3)]? ___Yes ___No*

(v) Is the treatment facility testing extracts of the waste residues for prohibited wastes having established treatment standards expressed as extract concentrations [§268.7(b)(1)] ___Yes ___No*

3. Land Disposal Facilities

a. Has the facility retained all notices and certifications from generators, storage and treatment facilities [268.7(c)(1)]? ___Yes ✓No*

b. Are wastes and waste residues tested for compliance with applicable treatment standards and prohibitions [§268.7(c)(2)]? ___Yes ✓No*

c. Are they being tested in conformance with the frequency specified in the waste analysis plan [§268.7(c)(3)] ✓Yes ___No*

Waste analysis plan has not been modified to include Land ban restriction provisions.

d. Are the appropriate tests (TCLP vs. total waste) being used [§268.7(c)(2)]? ___Yes ✓No*

C. Storage (§268.50)

1. a. Are restricted wastes exceeding treatment standards stored (excepting wastes subject to no migration exemptions, nationwide variances, case by case extensions, soft-hammered wastes)? ✓Yes ___No

If no, go to "c."

b. Are all containers clearly marked to identify content and date(s) entering storage [§268.50(a)(2)]? ___Yes ✓No*

Drums labeled as non-hazardous.

* A potential violation is indicated

ID Number: MSD007027543
Inspector: Dave Bockelmann
Date: 12-12-88

**Comments**

c. Do operating records track the location, quantity and dates that wastes exceeding treatment standards entered and were removed from storage [§264.73 or §265.73]? ___Yes ✓No*

Facility has not considered these wastes as hazardous

d. Do operating records agree with container labeling? [§268.50(a)(2) or §264.73 or §265.73] ✓Yes ___No*

Facility has considered these wastes as non-hazardous and used them as fuel for their boiler

e. Is waste exceeding treatment standards stored for less than 1 year? ✓Yes ___No

If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal? ___Yes ___No ?

If yes, state how: Facility does not consider waste as hazardous - waste is shipped to facility as non-hazardous waste + burned as fuel in their boiler.

f. Was/is waste exceeding treatment standards stored for more than one year? ___Yes ✓No

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal: _____

D. Treatment in Surface Impoundments (§268.4)

1. Are prohibited wastes placed in surface impoundments for treatment? ___Yes ✓No

If no, go to E.

2. Is the only recognizable "treatment" occurring in the impoundment either evaporation, dilution, or both [§268.4(b) and §268.3]? ___Yes* ___No

3. Did the facility submit a certification of compliance with minimum technology and ground water monitoring requirements, and the waste analysis plan to the Agency [§268.4(a)(4)]? ___Yes ___No*

4. Have the minimum technology requirements been met [§268.4(a)(3)]? ___Yes ___No*

a. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s) [§268.4(a)(3)(iii)]? ___Yes ___No*

* A potential violation is indicated

ID Number: MSD 007027543
Inspector: Dave Barkley
Date: 12-12-88

**Comments**

5. Have the Subpart F ground-water monitoring requirements been met [§268.4(a)(3)]? ___Yes ___No*

6. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record for all wastes with treatment standards or prohibition levels [§268.4(a)(2)]? ___Yes ___No*

7. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards or prohibition levels? ___Yes ___No

8. Provide the frequency of analyses conducted on treatment residues: _____

_____

Does the frequency meet the requirements of the waste analysis plan [§264.13 or §265.13]? ___Yes ___No*

9. Does the operating record adequately document the results of waste analyses performed [§264.13 or §265.13]? ___Yes ___No*

10. Have the hazardous waste residues that exceed the treatment standards and/or prohibition levels been removed adequately and on an annual basis [§268.4(a)(2)(ii)]? ___Yes ___No*

    a. If answer to 6 is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume? (note: sludge exceeding treatment standards must be removed) ___Yes ___No

11. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed? ___Yes ___No

12. When removed, were residues of restricted wastes managed subsequently in another surface impoundment? ___Yes ___No

    a. Were these residues subject to a valid 268.8 certification? ___Yes ___No*

13. When removed, were wastes treated prior to disposal? ___Yes ___No

    a. If yes, are waste residues treated on or offsite? ___Onsite ___Offsite

Inspector: [illegible]
Date: 12-12-88

Comments

b. Identify management method _____

E. Treatment

1. Does the facility operate treatment units (regulated or exempt) (not including surface impoundments)?
___Yes ✓No

If no, go to "F."

2. Describe the treatment processes, including exempt processes.

_____

3. Does the facility treat soft hammered wastes?
___Yes ___No

a. If yes, is treatment occurring as described in the generator's certification/demonstration [§268.8(c)(1)]?
___Yes ___No*

b. Did the treatment facility certify he treated the soft hammered waste as per the generator's demonstration and maintain copies of all certifications [268.8(c)(1)]?
___Yes ___No*

c. Did the treatment facility send a copy of the generator's demonstration and certification to the receiving treatment, recovery, or storage facility [§268.8(c)(2)]?
___Yes ___No*

4. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the restricted wastes are less than treatment standards or prohibition levels [§268.7(c)(2)]?
___Yes ___No*

5. Describe frequency of testing of treatment residuals.

_____

6. Was dilution used as a substitute for treatment [§268.3]?
___Yes* ___No

* A potential violation is indicated

ID Number: OSD 007027543
Inspector: Dave Bockelman
Date: 12-12-88

**Comments**

7. Are all notifications, certifications, and results of waste analyses kept in the operating record [§264.73(b) or §265.73(b)]? ___Yes ___No*

8. Are notices provided to land disposal facilities complete with Waste Number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [§268.7(b)(4) and (5) and §268.8(c)(1)]? ___Yes ___No*

9. If the waste or treatment residue will be further managed at another storage or treatment facility, has the treatment facility complied with the 268.7(a) notification and certification requirements applicable to generators [§268.7(b)(6)]? ___Yes ___No*

F. Land Disposal

1. Are restricted and/or prohibited wastes placed in land disposal units (landfills, surface impoundments** waste piles, wells, land treatment units, salt domes/beds, mines/caves concrete vault or bunker?) ✓Yes ___No

Hazardous waste ash placed in local landfill.

2. Did facility have the notice and certification from generators/treaters in its operating record that all prohibited wastes disposed met standards for generation or treatment [§§268.7(c)(1); 268.7(a),(b)]? ___Yes ✓No*

3. Did the facility obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards [§268.7(c)(2)] ___Yes ✓No*

If yes, was the frequency of testing as required by the facility's waste analysis plan [§264.13 or §265.13]? ___Yes ___No*

4. Were prohibited wastes exceeding the applicable treatment standards or prohibition levels placed in land disposal units [268.30] excluding national capacity variances [268.30(a)]? ✓Yes ___No

Hazardous waste ash placed in local landfill. No analysis done to see if ash meets treatment standards for KOO

If yes, did facility have an approved waiver based on no migration petition [268.6] or approved case-by-case or capacity extension [268.5] or treatment standard variance [268.44][§268.30(d), §268.31(d), §268.32(g), §268.33(e)]? ___Yes ✓No*

* A potential violation is indicated
**Do not include SIs addressed under Section "D" of this checklist.

Inspector: Dave Bohlman
Date: 12-12-88

**Comments**

5. Were restricted wastes subject to a national capacity variance or case-by-case extension disposed?
___Yes ✓No

   If yes, have the minimum technology requirements been met for all units receiving such wastes [§268.30(c), §268.31(c), §268.32(d), §268.33(d)]?
___Yes ___No*

6. Were adequate records of disposal maintained [§264.73(b) or §265.73(b)]? ___Yes ✓No*

7. If wastes subject to a nationwide variance, case-by-case extensions [268.5], or no migration petitions [268.6] were disposed, does facility have generator's notices [268.7(a)(3)] and records of disposal? [§264.73(b) or §265.73(b)] ___Yes ___No* N/A

8. If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports? ___Yes ___No N/A

9. If the owner/operator is disposing of a soft-hammer waste, is he maintaining the generators and treaters (if applicable) notices and certifications [§268.8(a)(2)-(a)(4)]? ___Yes ___No* N/A

   a. Is the facility disposing of any soft hammer wastes that may be classified as California wastes?
   ___Yes ___No

   b. Did the facility seek to verify whether these wastes may be subject to all restrictions, e.g., California ban? ___Yes ___No

* A potential violation is indicated

# LIST OF APPENDICES


APPENDIX A-1 - SOLVENT IDENTIFICATION CHECKLIST

APPENDIX A-2 - POTENTIAL F-SOLVENT WASTE MISCLASSIFICATION

APPENDIX B - TREATMENT STANDARDS FOR F-SOLVENTS

APPENDIX C - CALIFORNIA LIST RESTRICTIONS

APPENDIX D-1 - SOFT HAMMERED RESTRICTED F AND K WASTES IN FIRST THIRD

APPENDIX D-2 - DESCRIPTIONS OF SOFT HAMMERED RESTRICTED F AND K WASTES IN FIRST THIRD

APPENDIX E - FIRST THIRD WASTES FOR WHICH TREATMENT STANDARDS WERE SET

APPENDIX F - SOFT HAMMERED P AND U WASTES

APPENDIX G - POTENTIAL CALIFORNIA LIST APPLICABILITY TO SOFT HAMMER WASTES (F & K WASTES)

APPENDIX H - RESTRICTED WASTES SUBJECT TO NATIONAL VARIANCES

# RCRA Inspection Report

1. Inspector and Author of Report

David J. Bockelmann
Environmental Scientist

2. Facility Information

Koppers Company, Inc.
P. O. Box 160
Tie Plant, Mississippi 38960
MSD007027543

3. Responsible Company Official

Mr. J. D. "Rock" Clayton, Plant Manager

4. Inspection Participants

Mr. David J. Bockelmann, BPC
Ms. Karen McKinney, EPA
Mr. Leo Romanowski, EPA
Mr. J. D. "Rock" Clayton, Koppers
Mr. Gary McClelland, Koppers

5. Date and Time of Inspections

December 12, 1988 - 9:15 a.m. CST

6. Applicable Requirements

Mississippi Hazardous Waste Management Regulations (MWHMR) Parts 262, 264, 265, and 268. Mississippi Hazardous Waste Management Permit No. 88-543-01.

7. Purpose of Inspection

This was a Compliance Evaluation Inspection to determine the facility's overall compliance with the applicable interim status regulations and with the facility's Hazardous Waste Management Permit No. 88-543-01 which covers the operation, closure and post-closure requirements for the facility's surface impoundment.

8. Facility Description

Koppers Company, Inc. is located in the Town of Tie Plant which is approximately 5 miles southeast of Grenada, Mississippi. The facility uses creosote and oil borne pentachlorophenol in the pressure treatment of wood products for railroads, utilities and others.

The primary product is treated railroad cross-ties. Raw materials and treated products arrive and leave by rail and truck. The hazardous wastes which are generated, treated, stored and, in the past, disposed of at the facility are bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorphenol (K001), waste creosote (U051), and certain waste pentachlorophenol (F027). The facility has four hazardous waste management units which are a less than 90 day container/drum storage building, a surface impoundment, a spray irrigation field, and a boiler ash landfarm. A permit for the operation of the surface impoundment was issued on June 28, 1988. State administrative orders requiring the submittal of Part B permit applications for the spray irrigation field and the boiler ash landfarm were also issued on July 22 and 29, 1988. A Part B permit application for the boiler ash landfarm was received by the Bureau on November 9, 1988. The administrative order requiring the submittal of a Part B permit application for the spray irrigation field is currently under appeal by the facility.

The facility is currently in the process of closing the surface impoundment which was operated as a wastewater treatment lagoon and generated the listed hazardous waste K001. Treatment of wastewater in the surface impoundment was preceeded by a flow equalization tank, a pentachlorophenol and oil separator where pentachlorphenol and oil are recovered and recycled, a creosote separator where creosote is recovered and recycled, and a flocculation system. Since the start of closure at the surface impoundment, the facility has been disposing of their wastewater by pumping it to a series of two 10,000 gallon railroad tank cars where the wastewater is heated and evaporated to the atmosphere. The facility is currently in the process of constructing a wastewater pretreatment system and obtaining a Pretreatment permit to discharge the treated wastewater to the City of Grenada POTW.

The spray irrigation field was the final stage in the facility's wastewater treatment system. It is approximately four acres in size and is surrounded by a low berm for run-on/run-off control. The spray irrigation field received effluent from the surface impoundment which was land applied via six spray irrigation nozzles. The field is covered with non-food chain vegetation and was operated as a land treatment unit for the biodegredation of effluent from the surface impoundment prior to the start of closure at the surface impoundment.

The facility operates a boiler for the thermal conversion of wood and various wastes into steam. Prior to October of 1986 these wastes included the listed hazardous wastes K001, U051 and F027. The ash generated from this process is a listed hazardous waste and, prior to July, 1987, was land disposed on the boiler ash landfarm located in the southern portion of the facility. Prior to November 19, 1980, two old surface impoundments located in the central portion of the facility were closed and the waste sludge removed during closure was also disposed of at the boiler ash landfarm area. The facility currently operates the boiler burning wood and various wastes associated with wood treating operations. These wastes have been reported by the facility to be non-hazardous. The ash generated from this process is currently being disposed of at a local sanitary landfill. During this inspection it was found that the facility has apparently burned listed hazardous wastes along with non-hazardous wastes in the boiler and that the ash generated from the burning of these apparently hazardous wastes was also disposed of at the local sanitary landfill.

The facility operates a less than 90 day container/drum storage building located near the process area. The building is used to store drums of both hazardous and non-hazardous waste.

9. <u>Findings</u>

An inspection and review of the facility's records was conducted. These records included inspection logs, personnel training records, waste manifests, groundwater monitoring records and reports, financial assurance and liability insurance records, closure plans and the facility contingency plan.

The facility's inspection logs, personnel training records, closure plan and contingency plan were reviewed and found to be up-to-date and in compliance.

The facility utilizes the corporate financial test to demonstrate financial assurance for closure/ post-closure and liability insurance. This is currently being revised to include closure/post-closure costs and liability insurance for the boiler ash landfarm and will be resubmitted as soon as it is available.

A review of the facility's 1988 groundwater monitoring and analysis records for the surface impoundment, boiler ash landfarm and spray irrigation field was conducted. This review included data submitted by

Koppers as well as groundwater analytical data collected by U.S. EPA in May, 1988. The findings of this review with respect to each unit is outlined below.

Surface Impoundment. The facility was issued Hazardous Waste Management Permit No. 88-543-01 for the surface impoundment on June 28, 1988. Prior to this date the surface impoundment was regulated under the interim status standards contained within MHWMR Part 265. The first and second quarters of groundwater data were submitted under MHWMR Part 265 and the third and fourth quarters of groundwater data were submitted under the permit requirements. A review of this data found that no statistical analyses were reported. Site specific constituents were analyzed for during all four quarters. These showed constituent concentration levels above method 8270 detection limit, listed in SW-846, for wells R-1, R-10A, R-7, R-8A, R-9C and R-90 in the first quarter and well R-1 in the second, third and fourth quarters. In the absence of any statistical analyses, this data can only be interpreted as evidence of groundwater contamination at the surface impoundment.

Permit Condition IV.C.3. required that upgradient well R-1, which was improperly constructed, be replaced with a properly constructed well within thirty days of the effective date of the permit; this well has not yet been replaced. Additionally, because well R-1 is improperly constructed, the analytical data from it cannot be reliably evaluated.

Boiler Ash Landfarm. Groundwater monitoring at the boiler ash landfarm was first started in 1988. Monitoring was done on an accelerated schedule with one sampling event per month during February, March, April and May. A fifth sampling event was also conducted in July. A review of this data found that no MHWMR Part 265 Appendix III parameters or EPA interim primary drinking water standards were analyzed for during the first year sampling events as required by MHWMR 265.92(c)(1). The indicator parameter of Total Organic Halogen (TOX) was not included in any of the five rounds of analytical data or in the statistical analysis submitted for the fifth round sampling event, as required by MHWMR 265.92(c)(1), 265.92(d)(2), and 265.93(b). Site specific constituents were also analyzed for and reported at the boiler ash landfarm. Low level concentrations of nearly all the site specific polynuclear aeromatic hydrocarbons (PAH's) were repoted in all three downgradient wells during the first, second, third, and fifth round sampling events. Low level concentrations of a few of the phenolic

compounds were reported for the first, third, fourth and fifth round sampling events, no phenolic compounds were reported as being analyzed for in the second round event. Additionally, the U.S. EPA sampling event conducted in May, 1988, found the following constituent concentrations in downgradient well MW-3: 1600 ppb trichloroethene, 57 ppb cis - 1,2-dichloroethene, 6.5 ppb carbon disulfide and 1.6 ppb chloroform. From all of the data presented, it appears that there is groundwater contamination at the boiler ash landfarm. Because of the concentration levels reported for trichloroethene and cis - 1,2-dichloroethene, it is recommended that an analysis for these two constituents be included in all future sampling events at the boiler ash landfarm.

Spray Irrigation Field. The spray irrigation field is considered by the State of Mississippi to be a regulated hazardous waste management unit, Koppers is currently contesting this position.

Groundwater at the sprayfield was sampled on a quarterly basis during 1988. A review of this data found that no statistical analyses were submitted for any of the four quarters. Site specific constituents were analyzed for during all four quarters. These showed constituent concentration levels above method 8270 detection limit listed in SW-846 for wells SF-3 and SF-4 in the first quarter, well SF-2 in the second quarter and well SF-4 in the fourth quarter. In the absence of any statistical analyses, this data can only be interpreted as evidence of groundwater contamination at the surface impoundment.

A review of the facility's waste manifests for 1988 was also conducted. These manifests were for wastes which were shipped to the Koppers Grenada facility to be burned in the facility's boiler in conjunction with their fuel additives program. The ash generated from this process is currently disposed of at a local county landfill. A review of these manifests, and the waste analysis sheets for each manifest, found that several of the manifests were for wastes which appear to be hazardous waste. The following is an outline of these manifests:

| Manifest Doc. No. | Source[1] of Waste | No. of Containers | Total Quantity (lbs) | Date of Receipt |
|---|---|---|---|---|
| 67212 | Creosote Process Sludge from oil & water separator | 75 | 41,200 | 7/22/88 |
| 67213 | As described above | 74 | 40,947 | 7/30/88 |

| | | | | |
|---|---|---|---|---|
| 67214 | As described above | 83 | 46,940 | 8/9/88 |
| 00182 | PCP Separator | 48 | 30,260 | 8/24/88 |

1 Source description is taken from the waste analysis sheet for each individual manifest.

It appears from the source descriptions that these wastes are a K001 hazardous waste which is defined as "bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorphenol". Creosote or pentachlorophenol sludges from a wastewater separator would fit into this definition and would be classified as a K001 hazardous waste. The ash generated from the burning of a hazardous waste is also a hazardous waste. This being the case, Koppers appears to have improperly transported and disposed of K001 hazardous waste at the local Grenada County landfill. Additionally, all K001 hazardous wastes disposed of after August 8, 1988, would have been subject to the land disposal restrictions contained within MHWMR Part 268.

Following the record review a visual site inspection of the facility was conducted. The site inspection included the less than 90 day container/drum storage building, the surface impoundment, the spray irrigation field and the boiler ash landfarm.

The less than 90 day container/drum storage building contained 34 drums labeled as non-hazardous and 6 drums labeled as containing U051 hazardous waste. Four of these drums had an accumulation date of November 19, 1987, and the other 2 drums had an accumulation date of March 10, 1988. All six drums containing U051 hazardous waste had been stored for longer than 90 days.

The surface impoundment was inspected and is in the process of being closed. Sludges and associated soils had been removed. No closure activities were being conducted at the time of the inspection. A gap in the fence around the surface impoundment, created to allow the entrance of equipment for sludge and soil removal, should be closed until such time as closure activities resume.

The spray irrigation field was inspected. It is recommended that additional signs warning against unauthorized entry be placed along the east side fence line. It is further recommendedd that the gate be repaired as well as the west side fence line where some

small trees and limbs have fallen across the fence. The facility ceased operation of the spray irrigation field after wastewaters were removed from the surface impoundment and closure of the surface impoundment was initiated.

An inspection of the boiler ash landfarm found that contaminated soils removed from various facility process areas was being stored here on top of plastic. It is recommended that these soils not be stored in the boiler ash landfarm area.

10. Conclusions

Koppers Company, Inc. is in apparent violation of the following requirements of the applicable Mississippi Hazardous Waste Management Regulations and the requirements of Mississippi Hazardous Waste Management Permit No. 88-543-01:

(a) MHWMR 265.93 - Preparation, Evaluation, and Response - The facility has failed to perform the required statistical analyses at the surface impoundment and at the spray irrigation field and has failed to properly notify the Executive Director of the existence of groundwater contamination at these sites as required. Additionally, the facility has failed to properly notify the Executive Director of the existence of groundwater contamination at the boiler ash landfarm.

(b) MHWMR 264.71 and 264.72 - The facility failed to note and failed to report a significant manifest discrepancy in that K001 hazardous waste was brought on-site under manifests which described it as non-hazardous process waste containing used creosote or non-hazardous process waste containing used pentachlorophenol. (Note: This waste was subsequently burned in the facility's boiler)

(c) MHWMR Part 262 Subparts A, B and C - The facility improperly transported hazardous waste ash, derived from the burning of K001 hazardous waste in their boiler, to a facility, the local Grenada County landfill, which did not have an EPA identification number and was not permitted to dispose of hazardous waste. In addition, the facility had no records of these shipments being properly manifested, labeled or marked as required.

(d) MHWMR Part 268 - The facility did not have any records or certifications that would have shown

that the two shipments of waste (identified by Manifest Document Nos. 67214 and 00182) received on-site after August 8, 1988, the effective date of land disposal restriction treatment standards for K001 hazardous waste, would have met the land disposal restriction treatment standard for K001 prior to disposal as required.

(e) MHWMR 262.34 - The facility stored six drums of U051 hazardous waste at its less than 90 day container/drum storage building for longer than 90 days.

(f) MHWMR 264.14 - The facility did not maintain an adequate and continuous barrier around the permitted closing surface impoundment.

(g) MHWMR 265.302 - The facility failed to provide adequate run-on/run-off control and wind dispersal control systems for the boiler ash landfarm.

(h) Koppers needs to address the issue in Permit Condition IV.C.3. requiring that upgradient well R-1 be replaced with a properly constructed well.

(i) MHWMR 265.92 - Sampling and Analysis - The facility failed to analyze groundwater samples from the Boiler Ash Landfarm Monitoring wells for the indicator parameter of Total Organic Halogen (TOX) as required.

11. Recommendations are listed as follows:

Koppers need to break out their closure and post-closure cost estimates into specific units instead of lum sum. This would insure that all unit cost estimates are updated accordingly.

12. Signed

13. Approval

3/3/89

cc: Mr. James H. Scarbrough, EPA

**INTERIM STATUS COMPLIANCE CHECKLIST**

FACILITY Koppers Co., Inc. MSD 007027543
LOCATION Tie Plant Miss.
DATE 12/12/88
INSPECTORS Dave Boekelmann, MDNR
Karen McKinney, EPA
Leo Romanowski, EPA

Gary McLelland, Yard Foreman
J.D. Rook Clayton, Plant Manager

Drums - 6 of 0051
Additional signs @ SF (on East side Repairing at & west side of fence where trees & limbs have fallen on fence
Break out Totals for [illegible] unit.
[illegible] @ SF.

Process areas have been [illegible] contaminated [illegible] plastic [illegible]

1.) < 90 day container storage
2.) Surface impoundment
3.) Spray field
4.) Boiler ash handfarm

In compliance - Yes
Not in comp .nce - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| **SUBPART B - GENERAL FACILITY STANDARDS** | | | | |
| 265.12 Required Notices | | | | |
| a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source. | | | ✓ | |
| b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122. | | | ✓ | |
| 265.13 General Waste Analysis | | | | |
| Before treating, storing, or disposing of haardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements. | ✓ | | | |
| 265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility | | | | |
| a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless; | ✓ | | | Fences w/ locked gates around each unit. |
| 1) physical contact with the waste, structures, or equipment will not be injurious | | N/A | | |
| 2) disturbance of the waste or equipment will not violate the requirements of Part 265 | | N/A | | |

Not in compliance - No
Not applica : - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.14 - Continued | | | | |
| b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have: | | | | |
| 1) a 24-hour surveillance system | ✓ | | | Someone on site 24 hrs./day - 6 days a week. |
| 2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility | | | | Each unit fenced w/ lockable gate. |
| (ii) a means to control entry | ✓ | | | |
| c) A sign warning of the danger of intruding into the facility. | ✓ | | | |
| 265.15 Inspection and Monitoring | | | | |
| a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health. | ✓ | | | Units inspected weekly |
| b) The owner or operator must develop and follow a schedule and plan for inspections. | ✓ | | | |
| c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent. | ✓ | | | |
| d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection. | ✓ | | | |

| REQUIREM...f | Not in compliance - No<br>Not applicat - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.16 Facility Personnel Training | | | | |
| a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265. | ✓ | | | |
| b) The training program must be completed within six months of the effective date of Part 265. | ✓ | | | |
| c) There must be an annual review of the initial training in (a) above. | ✓ | | | |
| d) The owner or operator must maintain records of training. | ✓ | | | |
| e) Training records on current personnel must be kept until closure of the facility. | ✓ | | | |
| 265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes | | | | |
| a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. | | | N/A | |
| b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not: | | | | |
| 1) Generate extreme heat or pressure, fire or explosion, or violent reaction; | | | | |
| 2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient | | | | |

| REQUIREMENT | Not in compliance - No<br>Not applicable - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.17 - Continued-- | | | | |
| quantities to threaten human health; | | | N/A | |
| 3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; | | | | |
| 4) Damage the structural integrity of the device or facility containing waste; or | | | | |
| 5) Through other like means threaten human health or the environment. | | | | |
| **SUBPART C - PREPAREDNESS AND PREVENTION** | | | | |
| Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous wastes controlled by the State. | ✓ | | | |
| **SUBPART D - CONTINGENCY PLANS** | | | | |
| Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste. | ✓ | | | |
| **SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING** | | | | |
| 265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5) | | ✓ | | Facility has manifests for all wastes shipped on-site. Some described as non-hazardous appear to be for hazardous waste. |
| 265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of 265.71. | | | N/A | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter. | ✓ | | | |
| (b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director. | ✓ | | | |
| 265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b). | ✓ | | | |
| 265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA. | ✓ | | | |
| (c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility. | | | N/A | Facility not closed. |
| 265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75. | | | | |
| 265.76 The receipt of any unmanifested waste must be reported to the Director. | ✓ | | | None received |
| 265.77 The owner or operator must submit a report to the Director if any of the following occur: | ✓ | | | |
| a) releases, fires, explosions | ✓ | | | Facility not closed. |
| b) groundwater contamination | ✓ | | | |
| c) facility closure. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| **SUBPART F - GROUNDWATER MONITORING** | | | | |
| 265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90. | ✓ | | | |
| 265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94. | ✓ | | | |
| 265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water. | | | N/A | |
| **SUBPART G - CLOSURE AND POST-CLOSURE** | | | | |
| 265.111 The owner or operator must close his facility in a manner that: 1) minimizes the need for future maintenance, and 2) controls, minimizes, or eliminates post-closure escape of hazardous waste. | | | N/A | Facility not closed yet. |
| 265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.112(a) Continued-- | | | | |
| The closure plan must include: | | | | |
| 1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed. | ✓ | | | |
| 2) An estimate of the maximum inventory of wastes in storage or treatment at any given time. | ✓ | | | |
| 3) Steps to decontaminate facility equipment. | ✓ | | | |
| 4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates. | ✓ | | | |
| 265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes. | ✓ | | | closure of surface impoundment awaiting DNR approval of modified closure plan. |
| (b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes. | ✓ | | | |
| 265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated. | | | N/A | Facility or units not yet closed. |
| 265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan. | | | N/A | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.117(a) Post closure care must consist of at least: | ✓ | | | |
| 1) Groundwater monitoring | | | | |
| 2) Maintenance of the contaminant system. | ✓ | | | |
| The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include: | ✓ | | | |
| 1) Groundwater monitoring activities and frequency. | ✓ | | | |
| 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment. | ✓ | | | |
| 265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility. | | | N/A | |
| 265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste. | | | N/A | |
| **SUBPART H - FINANCIAL REQUIREMENTS** | | | | |
| 265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs. | ✓ | | | |
| **SUBPART I - OTHER FACILITY STANDARDS** | | | | |
| 265.170 - 265.172 The container must be compatible with the waste to be stored. | ✓ | | | |

Not closed

Use Fin. Test Mech.
1988 Update @ facility.

Add.
265.143 The owner operator must maintain a financial assurance for closure/post-closure

| | closure | post closure |
|---|---|---|
| A) Assurance Mechanism | | |
| a) Closure Trust Fund | ___ | ___ |
| b) Surety Bond | ___ | ___ |
| c) Letter of Credit | ___ | ___ |
| d) Closure Insurance | ___ | ___ |
| e) Corporate Guaranty | ___ | ___ |
| B) Amount [illegible] | ___ | ___ |

Add.
265.147(e) The owner [illegible] must maintain current liability [illegible]:
Insurance [illegible] ___
Financial Test
[illegible]
[illegible]
[illegible] (M/M)
[illegible]

Not in compliance - No
Not applic le - NA

| REQUIR..ENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.173 Containers holding hazardous waste must be kept closed and must not be opened, handled, or stored in a manner which may cause a rupture or leak. | ✓ | | | 6 drums of U051 stored since March 14 according to inspection report. |
| 265.174 Areas where containers are stored must be inspected weekly. | ✓ | | | < 90 day storage. |
| 265.176 Containers holding ignitable or reactive waste must be located at least 15 meters from the facility's property line. | | | N/A | 4 drums of U051 w/ 11-19-87 accumulation date |
| 265.177(a) Incompatible wastes must not be placed in the same container. | | | N/A | 2 drums of U051 w/ 3-10-88 accumulation date. |
| (b) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby must be separated or protected from the other materials. | | | N/A | 34 drums of Non-Haz. Waste |
| **SUBPART J - TANKS** | | | | |
| 265.192(b) Hazardous waste must be placed in a tank if they could cause the tank or its liner to leak. | | | N/A | No Haz. Waste Tanks |
| (c) Uncovered tanks must have a least two feet of freeboard unless other containment structures, a drainage control system, or other diversion structures with a capacity that equals or exceeds the volume of the top two feet of the tank. | | | | |
| (d) Tanks which have a continuous feed system must be equipped with a means to stop the inflow. | | | | |

| REQUIREM | Not applicab - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| 265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a). | | | N/A | |
| 265.194 Tanks must be inspected in accordance with 265.194. | | | N/A | No Haz. Waste Tanks. |
| 265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks. | | | N/A | No Haz. Waste Tanks |
| 265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with. | | | N/A | |
| 265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with. | | | N/A | |
| **SUBPART K - SURFACE IMPOUNDMENTS** | | | | |
| 265.222 Must maintain at least two feet of freeboard. | | | N/A | Surface impoundment is not yet closed but sludge has been removed + it has been removed from service. |
| 265.223 Earthen dikes must have protective cover. | | | N/A | |
| 265.225 Must conduct waste analyses and trial tests in accordance with 265.225. | ✓ | | | |
| 265.226(1) Must inspect the freeboard level at least once each operating day. | | | N/A | |
| (2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure. | | | N/A | |
| 265.228 The surface impoundment must close in accordance with 265.228. | ✓ | | | Not yet closed. |

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.229 Ignitable or reactive waste must not be placed in a surface impoundment unless 265.229 is complied with. | | | N/A | |
| 265.230 Incompatible wastes must not be placed in the same surface impoundment unless 265.17(b) is complied with. | | | N/A | |
| **SUBPART L - WASTE PILES** | | | N/A | |
| 265.251 A waste pile must be protected and managed to control wind dispersal. | | | | |
| 265.252 An owner or operator must conduct waste analyses unless the facility meets the exemptions of 265.252. | | | | |
| 265.253 Within one year after the effective date of the regulations, leachate or run-off from a pile must be controlled pursuant to 265.253. | | | | |
| 265.256 Ignitable or reactive waste must not be placed in a waste site unless 265.256 is complied with. | | | | |
| 265.257 The requirements of 265.257 for incompatible wastes must be complied with. | | | | |
| **SUBPART M - LAND TREATMENT** | | | | |
| 265.272(a) Hazardous waste must not be placed at a land treatment facility unless it can be made less hazardous or non-hazardous. | ✓ | | | |
| (b) Run-on must be diverted away from other active portions as of one year after the effective date of Part 265. | ✓ | | | |

| REQUIREMENT | Not in compliance - No<br>Not applica - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.272 -- Continued | | | | |
| (c) Run-off from active portions must be collected as of one year after the effective date of Part 265 . . . | ✓ | | | Berm around spray field to prevent run-off. |
| 265.273 Waste analyses must be conducted pursuant to 265.273. | ✓ | | | |
| 265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility. | | | N/A | No food chain crops. |
| (b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with. | | | N/A | No food chain crops. |
| (c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with. | | | N/A | |
| 265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278. | | ✓ | | Surface soils are clay. |
| 265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility. | ✓ | | | |
| 265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280. | | ✓ | | - Closure plan submitted.<br>- Post-closure ? |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.281 Ignitable or reactive waste must not be placed in a land treatment facility unless 265.281 is complied with. | | | N/A | |
| 265.282 Incompatible wastes must not be placed in the same land treatment area unless 265.17(b) is complied with. | | | N/A | |
| **SUBPART N - LANDFILLS** | | | | |
| 265.302(a) Run-on must be diverted away from the active portions within one year after the effective date of Part 265. | | | | |
| (b) Run-off from active portions must be collected within one year after the effective date of Part 265. | | | | |
| (d) Must control wind dispersal. | | | | |
| 265.309 The owner or operator must meet the surveying and recordkeeping requirements of 265.309. | ✓ | | | |
| 265.310 A landfill must comply with closure and post-closure requirements of 265.310. | ✓ | | | |
| 265.312 Ignitable or reactive waste must not be placed in a landfill unless 265.312 is complied with. | | | N/A | |
| 265.313 Incompatible wastes must not be placed in a landfill unless 265.17(b) is complied with. | | | N/A | |
| 265.314 Bulk or non-containerized liquid waste, waste containing free-liquids, or containers holding liquid waste should not be placed in a landfill unless the requirements of 265.314 | | | N/A | Landfill contains waste from burning of K001 |

| REQUIREM | Not applicab - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| **SUBPART Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT** | | | N/A | |
| 265.401(a) Must comply with 265. 17(b) | | | | |
| (b) Hazardous waste must not be placed in the treatment process or equipment if any failure of equipment or the process would occur. | | | | |
| (c) A continuously-fed process must be equipped with a means to stop the inflow. | | | | |
| 265.402 Waste analyses and trial tests must be conducted pursuant to 265. 402. | | | | |
| 265.403 Inspections must be made pursuant to 265.403. | | | | |
| 265.404 At closure, all hazardous waste and hazardous waste residues must be removed. | | | | |
| 265.405 Ignitable or reactive waste must not be placed in a treatment process unless 265.405 is complied with. | | | | |
| 265.406 Incompatible wastes must not be placed in the same treatment process unless 265.17(b) is complied with. | | | | |
| **SUBPART R - UNDERGROUND INJECTION** | | | N/A | |
| 265.430(a) underground injection of hazardous waste is not subject to the closure and post-closure or financial requirements of Part 265. Underground injection is subject to the other requirements of Part 265. | | | | |

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.315 (i) Empty containers must be reduced in volume as of one year after the effective date of Part 265. | ✓ | | | |
| **SUBPART O - INCINERATORS** | | | N/A | |
| 265.343 Must be at steady state conditions before adding hazardous waste. | | | | |
| 265.345 Waste analyses must be conducted pursuant to 265.345. | | | | |
| 265.347 Monitoring and inspections must be conducted as delineated in 265.347. | | | | |
| 265.351 At closure, the owner or operator must remove all hazardous waste and hazardous waste residues. | | | | |
| **SUBPART P - THERMAL TREATMENT** | | | N/A | |
| 265.373 Must be at steady state conditions before adding hazardous wastes. | | | | |
| 265.375 Waste analyses must be conducted pursuant to 265.375. | | | | |
| 265.377 Monitoring and inspections must be conducted as delineated in 265.377. | | | | |
| 265.301 At closure, the owner or operator must remove all hazardous waste residues. | | | | |
| 265.382 Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives. | | | | |

| REQUIREM | Not in compliance - No<br>Not applicat - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| Other questions or standards. | | | N/A | |
| Are there any other generators transporting their waste to this hazardous waste management facility? | | | | |

RCRA PERMIT INSPECTION CHECKLIST
PART I

EPA ID Number MSD 007027543

Name Koppers Co., Inc.

Address Tie Plant, MS

Major ____ Minor ____ Type of Handler TSD

Date of Inspection 12-12-88

Name of EPA Inspector Karen McKinney

Name of State Inspector Dave Bockelmann

Type of Violations See Report

State Enforcement Action

Date of Projected Compliance ____ Date of Actual Compliance ____

Penalty Assessed ____ Collected ____

EPA Enforcement Action

Follow-up Visit

General Comments

Gary McClelland Yard Foreman
J.D. "Rock" Clayton Plant Manager

EPA ID# _____

| | YES | NO |
|---|---|---|
| Does the facility have a copy of the RCRA permit on site? | ✓ | |

I. Monitoring and Records (264.13)

A. Sampling and Laboratory Procedures

| | | |
|---|---|---|
| 1. Are samples and measurements taken? | ✓ | |
| 2. Are the methods used for obtaining representative samples in compliance with methods from Appendix I of 40 CFR Part 261? | ✓ | |
| 3. Are the laboratory methods those specified in Test Methods for Evaluating Solid Waste Physical/ Chemical Methods SW-846; Standard Methods for the Examination of Water and Wastewater or an equivalent method as specified in the attached Waste Analysis Plan? | ✓ | |

B. Retention of Records

| | | |
|---|---|---|
| 1. Are all records and reports required under RCRA retained for a minimum of three years? | ✓ | |

Comments:

C. Records of Monitoring Information

| | | |
|---|---|---|
| 1. Dates | ✓ | |
| 2. Location | ✓ | |
| 3. Times of sampling or measurement | ✓ | |
| 4. Individuals who performed the sampling or measurements | ✓ | |
| 5. Dates anaylses were performed | ✓ | |
| 6. The individuals who performed the analyses | ✓ | |
| 7. Techniques or methods used | ✓ | |
| 8. The results or such analyses | ✓ | |

EPA ID# _____

| | YES | NO |
|---|---|---|
| II. Are any changes in the facility planned? (264.12) | | ✓ |
| A. If yes, has the Regional Administrator been notified? | N/A | |
| B. Will the change result in non-compliance? | N/A | |
| C. Has the facility been in non-compliance with the permit which may endanger health or the environment? | | ✓ |
| III. Documents to be maintained at the facility site | | |
| A. A copy of the RCRA permit | ✓ | |
| B. Waste Analysis Plan as required by 40 CFR 264.13 and the RCRA permit | ✓ | |
| C. Personnel Training Records (264.16) | ✓ | |
| D. Contingency Plan (264.53) | ✓ | |
| E. Closure Plan (264.112) | ✓ | |
| F. Cost Estimate for Facility Closure (264.142) | ✓ | |
| G. Operating Records (264.73) | ✓ | |
| H. Inspection Schedule (264.15) | ✓ | |

## PART II
## GENERAL FACILITY CONDITIONS

I. Maintenance of Facility

Describe:

| | | |
|---|---|---|
| A. Are general waste analysis conducted according to the Waste Analysis Plan. (264.13) | ✓ | |
| B. Does the facility provide adequate security through: (264.14) | | |
| 1. 24-hour surveillance system | ✓ | |
| 2. (a) Artificial or natural barrier around facility? | | ✓ |
| (b) Means to control entry through entrances | ✓ | |

Describe:

Fences + gates at all HWMA. No fence around C facility.

EPA ID# _____

## GENERAL INSPECTION REQUIREMENTS

| | YES | NO |
|---|---|---|
| I. Does the Permittee follow the inspection schedule attached to the RCRA permit? (264.15) | ✓ | |

Comments:

II. Personnel Training (264.16)

| | | |
|---|---|---|
| A. Does the owner/operator maintain Personnel Training Records at the facility? | ✓ | |
| B. How long are they kept? Indefinite | ✓ | |
| C. If yes, do they include: | | |
| (1) Job title and written job description of each position? | ✓ | |
| (2) Description of type and amount of training | ✓ | |
| (3) Records of training given to facility personnel | ✓ | |

III. Requirements for Ignitable, Reactive or Incompatible Waste (264.17)

| | | |
|---|---|---|
| A. Does the facility handle ignitable or reactive wastes? | | ✓ |
| (1) If yes, is waste separated and confined from sources of ignition or reaction, (open flames, smoking, cutting, and welding, hot surfaces, frictioning heat) sparks (static, electrical or mechanical) spontaneous ignition (e.g. from heat producing chemical reactions) and radient heat? | N/A | |
| (a) If yes, use narrative explanations sheet to describe separations and confinement procedures. | | |
| (b) If no, use narrative explanation sheet to describe sources of ignition or reaction. | | |
| B. Are smoking and open flame confined to specifically designated locations? | | |
| C. Are "No Smoking" signs posted in hazardous areas? | ✓ | |

EPA ID# _____

| | YES | NO |
|---|---|---|
| **IV. Preparedness and Prevention** | | |
| A. Is there evidence of fire, explosion or contamination of the environment? (264.31) | ✓ | |
| (1) If yes, use narrative sheet to explain. Groundwater contamination. | | |
| B. Is the facility equipped with: (264.32) | | |
| (1) Internal communication or alarm system? | ✓ | |
| (a) Is it easily accessible in case of emergency? | ✓ | |
| (2) Telephone or two-way radio to call emergency response personnel? | ✓ | |
| (3) Portable fire extinguishers, fire control equipment, spill control equipment an decontamination equipment? | ✓ | |
| (a) Is this equipment tested to assure its proper operation? | ✓ | |
| (4) Water of adequate volume and pressure and pressure for hoses, sprinklers or water spray system? | ✓ | |
| (a) Describe source of water: Groundwater Well | | |
| C. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35) | ✓ | |
| D. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes). (264.37) | ✓ | |
| E. In the case that more than one police or fire department might respond, is there a designated primary authority? (264.37) | ✓ | |
| (1) If yes, list primary authority Grenada | | |
| F. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors and equipment suppliers? (264.37) | ✓ | |
| (1) Are they readily available to all personnel? | ✓ | |

EPA ID# _____

Sent to county + hosp. is a county hosp.

| | YES | NO |
|---|---|---|
| G. Has the owner/operator arranged to familarize local hospitals with the properties of hazardous wate handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) | | ✓ |
| H. If State or local authorities decline to enter, is this entered in the operating record? (264.37) None declined. | ✓ | |
| **V. Contingency Plan and Emergency Procedures** | | |
| A. Is a contingency plan maintained at the facility? (264.51) | ✓ | |
| (1) If yes, is it a revised Spill Prevention Control and Countermeasure Plan? | ✓ | |
| B. Is there an emergency coordinator on site at all times? (264.55) | ✓ | |
| **VI. Manifest System, Record-Keeping and Reporting** | | |
| A. Does the facility receive waste from off-site? (264.71) | ✓ | |
| (1) If yes, does the owner/operator retain copies of all manifests? | ✓ | |
| (a) Are the manifests signed and dated and returned to the generator? | ✓ | |
| (b) Is a signed copy given to the transporter? | ✓ | |
| B. Does the facility receive any waste from rail or water (bulk shipment) transporter? (264.71) | | ✓ |
| (1) If yes, is it accompanied by a shipping paper? | N/A | |
| (a) Does the owner/operator sign and date the shipping paper and return a copy to the generator? | N/A | |
| (b) Is a signed copy given to the transporter? | N/A | |
| C. Has the owner/operator received any shipments of waste which were inconsistent with the manifest? (264.72) | ✓ | |
| (1) If yes, has he/she attempted to reconcile the descrepancy with the generator and transporter? | | ✓ |
| (a) If no, has the Regional Administrator been notified? Haz. waste described as non-Haz. on manifests. | | ✓ |
| D. Does the owner/operator keep a written operating record at the facility? (264.73) | ✓ | |
| (1) If yes, does it include: | | |
| (a) Description and quantity of each hazardous waste received? Facility doesn't consider waste hazardous | | ✓ |
| (b) Location and quantity of each hazardous waste at each location? Stored in <90 day storage area. | ✓ | |
| (c) Records and results of waste analyses? | ✓ | |

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| | YES | NO |
|---|---|---|
| (d) Report of incidents involving implementing of the contingency plan? | ✓ | |
| (e) Records and results of required inspections? | ✓ | |
| (f) Monitoring, testing or analytical data? | ✓ | |

VII. Closure

| | | |
|---|---|---|
| A. Does the facility have a copy of the closure plan and the annual cost estimate at the facility? (264.112) | ✓ | |
| B. What is the anniversary date on which the first closure cost estimate was prepared? (264.142) | | |
| C. Has the closure plan been annually adjusted for inflation according to Subpar 264.142(b)(1) and (b)(2)? | ✓ | |
| D. Has there been any changes in the closure plan that will require changing the cost estimate? (264.112) | | ✓ |
| (1) If yes, was the cost estimate changed? | | |

VIII. Storage in Containers

A. The permittee may store the following wastes in containers at the facility subject to the terms of the permit: N/A: < 90 day storage. Not permitted.

1. _____ 4. _____ 7. _____

2. _____ 5. _____ 8. _____

3. _____ 6. _____ 9. _____

B. Conditions of Containers (264.171)

Describe Drums in good condition.

C. Compatibility of Wastes with Containers (264.172)

Describe Waste compatible w/ containers.

EPA ID# _____

| | YES | NO |
|---|---|---|
| D. Management of Containers (264.173) | | |
| (1) Are all containers closed? | ✓ | |
| (2) Are containers stored in an acceptable manner? | ✓ | |
| E. Containment (264.175) | | |
| (1) Any cracks or gaps? | | ✓ |
| (2) Sufficient to contain all spills, leaks, and accumulated precipitation? | ✓ | |
| (3) Is the area sloped or have the capacity to be drained? | ✓ | |
| (4) Can it contain 10% of volume of containers? Drums contain non-liquid of wastes. | ✓ | |
| (5) Run-on prevention (a) If no, go to (4) above | ✓ | |
| (6) Any sumps or other collection? (a) If yes, can they prevent an overflow? | | ✓ |
| F. Containers holding ignitable or reactive waste must be located at Least 15 meters (50 ft) from the Facility's property line (264.176) | N/A | |
| G. Are you combining incompatible waste (264.177)? | | ✓ |

IX. Storage in Tanks

A. Waste Identification

Describe (See Permit) Non-Haz. Waste Tanks

B. Design of Tanks

Describe (See Permit) No Haz. Waste Tanks

C. General Operating Requirements (264.192)

Describe (See Permit and Attachments) N/A

D. Special Requirements for Ignitable and Reactive Wastes (264.198)

Describe (See Permit and Attachments) N/A

E. Special Requirements for Incompatible Wastes (264.199)

Describe (See Permit and Attachments) N/A

# RCRA INSPECTION REPORT

1. Inspector and Author of Report

David J. Bockelmann
Environmental Scientist

2. Facility Information

Koppers Company, Inc.
MSD007027543
P. O. Box 160
Tie Plant, Mississippi 38960

3. Responsible Company Official

J. D. "Rock" Clayton, Plant Manager
Dave King, Environmental Coordinator - Keystone

4. Inspection Participants

Dave Bockelmann, MSDNR
Karen McKinney, USEPA
J. D. "Rock" Clayton, Koppers
Dave King, Keystone

5. Date and Time of Inspections

May 16, 1988 - 9:15 a.m. CST

6. Applicable Regulations

Mississippi Hazardous Waste Management
Regulations 262 and 265.

7. Purpose of Inspection

This was a Compliance Evaluation Inspection to determine the facility's overall compliance with the applicable interim status regulations.

8. Facility Description

Koppers Company, Inc. is located in the Town of Tie Plant which is approximately 5 miles southeast of Grenada, Mississippi. The facility uses creosote and oil borne pentachlorophenol in the pressure treatment of wood products for railroads, utilities and others. The primary product is treated railroad cross-ties. Raw materials and treated products arrive and leave by rail and truck.

The hazardous wastes which are generated, treated, stored, and/or disposed of at the facility are bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol (K001), waste creosote (U051), and certain waste pentachlorophenol (F027). The facility has four hazardous waste management units which are a less than 90 day container/drum storage area, a surface impoundment, a spray irrigation field, and a boiler ash landfarm. At the time of this inspection a permit for the operation of the surface impoundment was under review and was subsequently issued on June 28, 1988. Orders requiring the submittal of Part B permit applications for the spray irrigation field and the boiler ash landfarm were also issued on July 22 and 29, 1988.

The facility currently operates a surface impoundment which is approximately 0.78 acres in size and has an operating depth of about 6-7 feet. The surface impoundment is operated as a wastewater treatment lagoon and generates the listed hazardous waste K001. Treatment of wastewater in the surface impoundment is preceded by a flow equalization tank, a pentachlorophenol and oil separator where pentachlorophenol and oil are recovered and recycled, a creosote separator where creosote is recovered and recycled, and flocculation. Closure of the surface impoundment will begin on or before November 8, 1988.

The spray irrigation field is the final stage in the facility's wastewater treatment system. It is approximately four acres in size and is surrounded by a low berm for run-on/run-off control. The spray irrigation field receives effluent from the surface impoundment which is land applied via six spray irrigation nozzles. The field is covered with non-food chain vegetation and is operated as a land treatment unit for the biodegradation of effluent from the surface impoundment.

The facility operates a boiler for the thermal conversion of wood and various wastes into steam. Prior to October of 1986 these wastes included the listed hazardous wastes K001, U051, and F027. The ash generated from this process is a listed hazardous waste and, prior to July, 1987, was land disposed on the boiler ash landfarm located in the southern portion of the facility. The facility still operates the boiler, burning wood and non-hazardous wastes which come from the process areas (cleaning of the treatment cylinders and door pit areas, etc.) and disposes of the ash at a local landfill. Prior to November 19, 1980, two old surface impoundments located in the central portion of the facility were closed and the waste sludge removed during closure was disposed of at the boiler ash landfarm area.

The facility operates a less than 90 day container/drum storage building located near the process area. The building is used to store drums of non-hazardous waste which is burned in the boiler and drums of hazardous waste prior to being shipped off-site.

9. Findings

An inspection and review of the facility's records was conducted. These records included inspection logs, personnel training records, waste manifests, groundwater monitoring records, financial assurance and liability insurance records, closure plans and a facility contingency plan. Records at the facility were kept back to 1981.

Waste manifests, financial assurance and liability insurance records, closure plans and the facility contingency plan were reviewed and found to be in compliance.

A review of the groundwater monitoring records for the surface impoundment and the spray irrigation field found that these records were kept for 3 years and were up-to-date. Groundwater monitoring at the boiler ash landfarm began in February, 1988. Results of this monitoring were not yet available.

A review of the personnel training records found that they were kept for 3 years and were up-to-date for all employees with the exception of Mr. Monroe Harper who had not received a training review in 1987. Mr Harper needs to receive a training review and have his training record updated.

A review of the inspection logs found that they were up-to-date and kept in proper order. However, it is recommended that the following additions be included in the inspection logs. The inspection log for the surface impoundment should include notations for inspecting the fence and signs. The inspection log for the less than 90-day container/drum storage building should include notations for inspecting the conditions of the drums and should note when no drums are being stored. The inspection log for the boiler ash landfarm should be more specific and include notations for inspecting the fence, signs, evidence of releases (from run-off or wind dispersal) and comments on general site conditions.

Following the record review a visual site inspection of the facility was conducted. The site inspection included the less than 90-day container/drum storage building, the facility process area, the boiler ash landfarm, the surface impoundment and the spray irrigation field.

The less than 90-day container/drum storage building contained 6 drums of hazardous waste (U051). Hazardous waste labels were attached to the drums; however, no accumulation dates were recorded on the drums. The storage building also contained 74 drums of non-hazardous waste which is burned in the facility's boiler.

The next area inspected was the facility process area which includes the treatment cylinders, process tanks and the boiler. A concrete pad adjacent to the boiler feed hopper contained drums

of non-hazardous waste which is fed into the boiler and burned along with scrap wood chips. Prior to October, 1986, this pad was operated as a less than 90-day container/drum storage area for hazardous waste which was burned in the boiler. There was no record of this pad having been cleaned-up or decontaminated after the facility ceased storing hazardous waste drums on the concrete pad. This area needs to be closed in accordance with Mississippi Hazardous Waste Management Regulation (MHWMR) 265.111 and 265.114 and the closure procedure documented. In addition, there were no records available to document the clean out or decontamination of the boiler in changing over from burning hazardous waste to burning non-hazardous waste. However, in subsequent conversations and meetings with Mr. Rob Anderson (Keystone Environmental Resources, Inc.) and Mr. Rock Clayton (Plant Manager, Koppers Company, Inc.) the following information concerning the boiler change over was presented. Koppers stopped receiving and stopped burning hazardous waste in the boiler in October, 1986. The boiler was shut down at 3:00 p.m. on April 13, 1987. The boiler fire box was cleaned out and all the fire brick within the fire box was replaced. The ash collection system and the ash collection bins were emptied and cleaned out. The boiler started back up burning non-hazardous waste on May 7, 1987. In July, 1987, the facility stopped placing ash on the boiler ash landfarm and began disposing of it at a local landfill.

The facility's Part A listed an area within a concrete wall which surrounds the process tanks as an interim status container/drum storage area. However, Mr. Dave King (Keystone Environmental Resources, Inc.) and Mr. Rock Clayton (Plant Manager, Koppers Company, Inc.) explained that this area was never actively used because of the difficulty in placing and retrieving drums over the concrete wall which is approximately 3 feet high. The facility needs to document that this area was never actively used, that no spills from containers/drums occurred, and that the area was effectively closed by the removal of any containers/drums that were originally placed there.

The boiler ash landfarm is located in the southern portion of the facility and has not been used since July, 1987. Prior to July, 1987, it was operated as a hazardous waste landfill and as such is subject to the regulations governing landfills (Subpart N of Part 265 of the Mississippi Hazardous Waste Management Regulations - MHWMR). The boiler ash landfarm is not managed to control run-on/run-off or the dispersal of the ash by wind. Some of the ash from the unit could be seen on a facility road running along the outside of the unit. Additionally, the unit is surrounded by a three-strand barbed wire fence which is inadequate security for a landfill. Additional signs are needed and the gate at the northern part of the unit did not have a lock to prevent entry. The unit has one background and three downgradient monitoring wells.

The surface impoundment is located in the east central portion of the facility and is surrounded by a fence on all sides.

Additional signs are necessary so that they can be seen from all approaches. The facility has received an operating permit for the surface impoundment and will be required to close the surface impoundment on or before November 8, 1988. The unit has two background and six downgradient monitoring wells.

The spray irrigation field is located at the northern end of the facility and consists of six spray irrigation nozzles and is surrounded by a low berm to control run-on/run-off. Access is controlled by a three-strand barbed wire fence which is in poor condition near the sprayfield gate. The fence near the gate has apparently been knocked down due to the placement and removal of material from a scrap pile which is located within the sprayfield fence. The fence in this area needs to be repaired and it is recommended that the scrap pile be removed. The northern portion of the sprayfield perimeter is bounded by a public road and a residential area. The fence along the northern perimeter of the sprayfield is inadequate security because of the proximity of the public road and residential area. Extra signs are also needed so that they can be easily seen from all approaches. The unit has one background and three downgradient monitoring wells.

Koppers contends that the spray irrigation field is not a regulated unit and has operated it without having interim status. Subsequent to this inspection, an Administrative Order has been issued to Koppers requiring them to submit a complete Part B post-closure permit application for the spray irrigation field.

10. Conclusions

Koppers is in apparent violation of the following requirements of the applicable regulations:

1. MHWMR Part 262.34 - Accumulation Time - Koppers operates a less than 90-day container/drum storage building. Six drums of hazardous waste were being stored at the time of the inspection. These drums contained hazardous waste labels but no accumulation dates were recorded on the labels as required.

2. MHWMR Part 265.14 - Security - The facility has inadequate fencing surrounding the boiler ash landfarm. Since the boiler ash landfarm is not located within the operating portion of the facility it needs to have better security to prevent unknowing entry. Additionally, there is no lock on the gate at the boiler ash landfarm.

   That portion of the fence that extends along the northern perimeter of the spray irrigation field and is adjacent to the public road and residential area is inadequate security to prevent unknowing entry to the

unit. Additional signs are also needed so that they can be easily seen from all approaches to the unit.

3. MHWMR Part 265 Subpart G - Closure and Post-Closure Care - The facility has not documented the closure of the original interim status container storage area (located within the concrete wall that surrounds the process tanks). The facility has not closed the less than 90-day container/drum storage area that was located on the concrete pad adjacent to the boiler feed hopper (this area is presently being used for non-hazardous storage). The facility has not closed the spray irrigation field (still being operated) or the boiler ash landfarm.

   Subsequent to this inspection Administrative Order 1440-88 has been issued, which contains a closure schedule for the spray irrigation field.

4. MHWMR Part 265 Subpart N - Landfills - The facility's boiler ash landfarm has been operated as a landfill and therefore must comply with the landfill requirements. The facility has not provided run-on/run-off control or means to control wind dispersal of the ash.

5. Section 3005 Solid Waste Disposal Act - Permit for Treatment, Storage, or Disposal of Hazardous Waste - The facility has operated the spray irrigation field without ever having interim status. The original Part A submitted in 1980 did not include the spray irrigation field and the facility has not submitted a Part B permit application to operate this unit.

   Subsequent to this inspection, Administrative Orders 1438-88 and 1440-88 have been issued requiring the facility to submit Part B permit applications for both the spray irrigation field and the boiler ash landfarm.

11. Signed

Inspector

DIVISION OF SOLID WASTE

REVIEWED BY _____

DATE _____

COMMENTS _____

12. Approval

Wm Stephen Snyder

cc: Mr James H. Scarbrough, EPA

FILE COPY

September 6, 1988

CERTIFIED MAIL NO. P 677 709 081

Mr. J. R. Batchelder
Vice President and Manager
Technical and Environmental Services
Tar and Wood Products Sector
Koppers Company, Incorporated
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219

Dear Mr. Batchelder:

Re: Compliance Evaluation Inspection
Koppers Company, Inc.
MSD 007027543

On May 16, 1988 a Compliance Evaluation Inspection (CEI) was performed at the above referenced facility. This inspection was conducted to determine the facility's compliance with Mississippi Hazardous Waste Management Regulations. Enclosed is a copy of the inspection checklist and a copy of the inspection report which outlines the deficiencies found during the inspection.

Further enforcement action is being considered which will address these violations. Please respond within ten days of receiving this letter with any comments you may have concerning the inspection report. The Bureau will consider these comments prior to taking any enforcement actions.

If you should require any additional information or if you should have any questions, please contact me at (601) 961-5171.

Sincerely,

David J. Bockelmann
Hazardous Waste Division

Enclosures
cc: James H. Scarbrough, EPA (w/enclosure)
Robert J. Anderson, Keystone

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUL 14 1988

4WD-RCRA

RECEIVED
JUL 18 1988
Dept. of Natural Res.
Bureau of Pollution Con.

Mr. Sam Mabry, Chief
Hazardous Waste Branch
Bureau of Pollution Control
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Re: Koppers Company, Inc.
MSD 007 027 543
Compliance Evaluation Inspection Report

Dear Mr. Mabry:

Enclosed please find the referenced document which discusses violations at the May 16, 1988, inspection conducted by EPA and MSDNR. Several violations were found at this facility. Specifically, at issue is the closure of the sprayfield and the ash landfarm and the fact that Koppers is operating the sprayfield without ever having interim status for this unit. Additional violations were found and also need to be addressed. Per the Memorandum of Agreement, MSDNR has the primary responsibility for enforcement. Please advise us of your intended action.

If you have any questions concerning this matter, please contact Karen McKinney at (404) 347-7603.

Sincerely yours,

Allan E. Antley

Allan E. Antley, Chief
Waste Compliance Section
RCRA Branch

Enclosure

RCRA SITE INSPECTION

1) Inspection and Author of Report

Karen McKinney
Environmental Engineer

2) Facility Information

Koppers Company, Inc.
MSD 007 027 543
P.O. Box 160
Tie Plant, MS 38960

3) Responsible Official

J.D. (Rock) Clayton, Plant Manager
Dave King, Environmental Coordinator - Keystone

4) Inspection Participants

Karen McKinney, USEPA
David Bockelmann, MSDNR
Dave King, Keystone
J.D. (Rock) Clayton, Koppers

5) Date and Time of Inspection

May 16, 1988 - 9:15 a.m. CST

6) Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Sections 262 and 265 (adopted by reference and therefore cited herein as 40 CFR).

7) Purpose of Inspection

This inspection was a USEPA Compliance Evaluation Inspection (CEI) to determine the facility's overall compliance with the applicable interim status regulations.

8) Facility Description

The Koppers Tie Plant facility is located about five miles southeast of Grenada, Mississippi. The facility uses creosote and pentachlorophenol-in-oil in the pressure treatment of wood products for railroad ties, utility poles and pilings. The hazardous wastes produced by this facility are K001, U051, and F027 and consist of bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol (K001), and waste creosote (U051), or certain waste pentachlorophenol (F027). The regulated waste management units at the facility are a drum storage area, a surface impoundment, an ash landfarm, and a sprayfield. The facility has a permit under review by the Mississippi Commission for the operation of the surface impoundment.

The surface impoundment is used as a wastewater treatment lagoon. It is about one-half acre in size and has a maximum operating depth of about seven feet. The surface impoundment generates K001 (bottom sediment sludge from the treatment of wastewaters from wood preserving processes using creosote or pentachlorophenol). The surface impoundment is preceeded by a mechanical oil/water separator and flow equalization which recaptures product and minimizes the amount of creosote which flows into the impoundment and becomes waste. Wastewater from the impoundment is pumped to a sprayfield for treatment. Koppers is in the process of obtaining an operating permit from the State for the impoundment. The facility plans to close the impoundment in November 1988.

The sprayfield is located on the north-northwest section of the property. It is about four acres in size and surrounded by a low berm that controls run-on/run-off. The field is covered with non-food chain vegetation. The sprayfield receives wastewater after it has been pretreated by two separate processes. The production process includes two oil/water separators which operate in series. The first separator receives an oil/water mixture and a flocculation agent. The solids are removed, pentachlorophenol and oil are recovered and recycled back to the process before the wastewater passes into a second separator. Here creosote is removed and recycled back to the process.

Effluent from the surface impoundment is periodically pumped to the sprayfield. The frequency of pumping depends upon water levels within the surface impoundment and climatic conditions. Spraying does not occur during rainfall.

Koppers operates a boiler at its facility for the conversion of thermal energy from wood and various wastes into steam. These wastes included the listed hazardous wastes K001, U051, and F027. The ash generated from the operation of the boiler was placed on a landfarm until 1987. The landfarm had been used, prior to November 19, 1980, for the disposal of wood treating process wastes which came from old surface impoundments that had been closed. The ash is a listed hazardous waste thereby making the ash landfarm a regulated land disposal unit. Koppers stopped burning the hazardous waste in July of 1987. The facility stopped placing the ash on the landfarm at that time. The facility still burns non-hazardous waste in the boiler which comes from the process areas (cleaning of the treatment cylinders and door pit areas, etc.) and disposes of the ash at a local landfill.

The facility operates a less than 90-day storage building located in the process area. Koppers previously had interim status for a storage area located near the holding tanks. This area was used only once and is no longer in use. Stored in the new building are drums containing the non-hazardous waste which is used in the boiler and hazardous waste which is stored until it is shipped off-site.

9) Findings

A record review of the inspection logs, personnel training records, manifests, closure plans, ground water monitoring records, and the contingency plan was conducted. Records were kept back to 1981.

The inspection logs were kept in proper order. However, additions should be made to the log for the surface impoundment inspections to include the fence and signs. Also, notations should be made into the storage log when no drums are being stored and include the condition of the drums on the checklist. The ash landfarm log should be more specific and include comments.

The personnel training records were maintained for three years or more. Only one employee had not had training in 1987, Monroe Harper who is the assistant treating supervisor. Mr. Harper needs to have a training review and his records updated.

Manifests, closure plans, and the contingency plan were found to be in compliance. Financial assurance and liability insurance records were inspected and found to be in compliance.

The ground water monitoring records were reviewed. The records were kept for three years for the surface impoundment and sprayfield. The ash landfarm began monitoring in February of 1988.

An inspection of the operating area and regulated units followed the record review. The first area looked at was the less than 90-day storage area. Six drums of hazardous waste (U051) were being stored at the time of the inspection. Hazardous waste labels were used on the drums however no accumulation dates were recorded on the labels. Also stored in the building were 74 drums containing non-hazardous waste solids which are burned in the boiler.

The next area looked at was the process area which includes the treatment cylinders, creosote tanks, and the boiler. An area inside the concrete wall surrounding the creosote tanks used to be the facility's old interim storage area. This area was used only once since it became too difficult to lift the drums over the wall to store and remove them. Therefore this area must be closed out in accordance with 40 CFR Part 265 Subpart G. Since the facility did not use this area to store containers, it created a less than 90-day storage area next to the boiler. The hazardous waste was stored on the concrete pad near the boiler until they fed it into the boiler along with the wood chips. The facility still uses the concrete pad to store the non-hazardous waste until it is ready to burn. There was no record of a clean-up or decontamination of this storage pad after the facility ceased burning hazardous waste. Additionally, records were not available to document the decontamination of the boiler after the facility stopped burning hazardous waste. However, Keystone (Koppers' Environmental Division) representative Rob Anderson told David Bockelmann in a phone conversation after the inspection, that the facility had cleaned out the boiler after it ceased burning hazardous waste. The facility should document the procedures used in the process of the cleaning of the boiler.

After the process area was seen the ash landfarm was inspected. The ash landfarm is a land disposal unit and is therefore subject to the landfill regulations (Subpart N of 40 CFR Part 265). The facility has no run-on and run-off control for the landfarm. Additionally,

the unit is surrounded by a three-strand barb-wire fence which is inadequate security for a landfill. The fence has a gate at the front which contains no lock to prevent entry. There is no wind dispersion control for the flyash and some of the ash could be seen on the roads and outside the unit. More signs are needed at the ash landfarm. The facility has not begun closure of the ash landfarm. There are four groundwater monitoring wells for the ash landfarm.

The surface impoundment is surrounded by a fence on all sides. Signs are posted along the fence, however, there needs to be more signs posted. The signs cannot be seen from all approaches to the impoundment. At least two feet of freeboard was maintained. Koppers is in the process of receiving an operating permit from MSDNR for the surface impoundment. There are eight groundwater monitoring wells for the impoundment.

The sprayfield was the last area observed at Koppers. The sprayfield has four groundwater monitoring wells. The unit is surrounded by a three-strand barb-wire fence which was in poor condition at the front entrance to the sprayfield. The fence had been torn down to place or remove material from the scrap pile in the sprayfield. Additionally, the fence is inadequate at the north end of the sprayfield since there is a public road near it along with several houses and a school nearby. There also needs to be more signs posted especially at the north end where the sprayfield is exposed to the public road and houses. There was a lot of vegetation overgrowth around the sprayfield and fence.

The sprayfield itself consists of six spray nozzles located throughout the field. Around the nozzle there is brownish-black sludgy material on the ground. There is a berm that surrounds the sprayfield for run-on control.

The facility continues to use the sprayfield although it does not have interim status or a complete Part B filed with the state.

10) <u>Conclusions</u>

Koppers has violated the following requirements of the applicable regulations:

- 40 CFR Part 262.34 - Accumulation Time - Koppers operates a less than 90-day storage area for its hazardous waste. The drums contain hazardous waste labels but no accumulation dates are recorded as required.

- 40 CFR Part 265.14 - Security - The facility has inadequate fencing around the ash landfarm. Since this unit is not located within the operating portion of the facility it needs to have better security to prevent unknowing entry. Additionally, there is no lock on the gate at the ash landfarm.
  The fence at the northern end of the sprayfield provides inadequate security to prevent unknowing entry to the unit. This is especially directed toward the area next to the public road where residential homes and a school are located.

Additionally, more signs are needed at all units to prevent unknowing and unauthorized entry. Signs were covered by vegetation or nonexistant in some areas surrounding the units. Signs need to be placed so they can be seen from any approach to the unit.

- 40 CFR Part 265 Subpart G - Closure and Post-Closure Care - The facility has not closed out the following units: the interim container storage area (next to the creosote tanks); the less than 90-day storage area near the boiler (still being used for non-hazardous waste storage); the ash landfarm; and the sprayfield (still being operated). Additionally, post-closure care will be needed for the sprayfield and ash landfarm.

- 40 CFR Part 265 Subpart N - Landfills - Koppers ash landfarm is considered a landfill and therefore must comply with the landfill requirements. The facility has not provided run-on and run-off control for the unit. Additionally, there is no control for wind dispersal of the ash. The facility has also failed to begin closure of the unit.

- Section 3005 Solid Waste Disposal Act - Permits for Treatment, Storage, or Disposal of Hazardous Waste - The facility has operated the sprayfield without ever having interim status. The original Part A submitted in 1980 did not include the sprayfield. The facility also has not submitted a Part B permit application to operate the regulated unit.

11) Signed

Karen McKinney

Karen McKinney
Inspector

7/5/88
Date

12) Concurrence

Doyle T. Brittain

Doyle T. Brittain, Chief
West Compliance Unit

7/5/88
Date

Approval

Allan E. Antley

Allan E. Antley, Chief
Waste Compliance Unit

7/5/88
Date

# INTERIM STATUS COMPLIANCE CHECKLIST

FACILITY Koppers Company, Inc.
LOCATION Tie Plant, Mississippi
DATE 5-16-88
INSPECTORS Dave Bockelmann MBPC
Karen McKinney EPA

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| **SUBPART B - GENERAL FACILITY STANDARDS** | | | | |
| 265.12 Required Notices | | | | |
| a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source. | | | ✓ | |
| b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122. | | | ✓ | |
| 265.13 General Waste Analysis | | | | |
| Before treating, storing, or disposing of haardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements. | ✓ | | | |
| 265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility | | | | |
| a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless; | | | | |
| 1) physical contact with the waste, structures, or equipment will not be injurious | | ✓ | | |
| 2) disturbance of the waste or equipment will not violate the requirements of Parr 265 | | ✓ | | |

| REQUIREMENT | Not in compliance - No<br>Not applica[illegible] - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.14 - Continued | | | | |
| b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have: | | ✓ | | |
| 1) a 24-hour surveillance system | ✓ | | | |
| 2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility | ✓ | | | - Signs & fire extinguishers @ contains [illegible] |
| (ii) a means to control entry | ✓ | | | |
| c) A sign warning of the danger of intruding into the facility. | ✓ | | | - Additional signs on all areas - especially spray field. |
| 265.15 Inspection and Monitoring | | | | |
| a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health. | ✓ | | | Inspection logs should be more detailed for Landfarm (i.e. fence, berm-integrity; evidence of releases) + a column for comments. |
| b) The owner or operator must develop and follow a schedule and plan for inspections. | ✓ | | | |
| c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent. | ✓ | | | |
| d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection. | ✓ | | | |

| REQUIREM...T | Not in compliance - No<br>Not applicat - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| **265.16 Facility Personnel Training** | | | | |
| a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265. | ✓ | | | ~~1987 Training sheets were not dated~~<br>Update training records for all personnel.<br>Update Part B personnel or just list jobs descriptions. |
| b) The training program must be completed within six months of the effective date of Part 265. | ✓ | | | |
| c) There must be an annual review of the initial training in (a) above. | ✓ | | | |
| d) The owner or operator must maintain records of training. | ✓ | | | |
| e) Training records on current personnel must be kept until closure of the facility. | ✓ | | | |
| **265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes** | | | | |
| a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. | | | ✓ | |
| b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not: | | | ✓ | |
| 1) Generate extreme heat or pressure, fire or explosion, or violent reaction; | | | ✓ | |
| 2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient | | | ✓ | |

| REQUIREMENT | Not in compliance - No<br>Not applicable - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.17 - Continued-- | | | | |
| quantities to threaten human health; | | | | |
| 3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; | | | ✓ | |
| 4) Damage the structural integrity of the device or facility containing waste; or | | | ✓ | |
| 5) Through other like means threaten human health or the environment. | | | ✓ | |
| **SUBPART C - PREPAREDNESS AND PREVENTION** | | | | |
| Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous wastes controlled by the State. | ✓ | | | |
| **SUBPART D - CONTINGENCY PLANS** | | | | |
| Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste. | ✓ | | | |
| **SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING** | | | | |
| 265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5) | ✓ | | | |
| 265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of 265.71. | | | ✓ | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter. | ✓ | | | |
| (b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director. | ✓ | | | |
| 265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b). | ✓ | | | |
| 265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA. | ✓ | | | |
| (c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility. | ✓ | | | |
| 265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75. | ✓ | | | |
| 265.76 The receipt of any unmanifested waste must be reported to the Director. | ✓ | | | |
| 265.77 The owner or operator must submit a report to the Director if any of the following occur:<br>a) releases, fires, explosions<br>b) groundwater contamination<br>c) facility closure. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| **SUBPART F - GROUNDWATER MONITORING** | | | | |
| 265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90. | ✓ | | | |
| 265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94. | ✓ | | | |
| 265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water. | | | ✓ | |
| **SUBPART G - CLOSURE AND POST-CLOSURE** | | | | |
| 265.111 The owner or operator must close his facility in a manner that: | | | | |
| 1) minimizes the need for future maintenance, and | ✓ | | | |
| 2) controls, minimizes, or eliminates post-closure escape of hazardous waste. | ✓ | | | |
| 265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT. | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.112(a) Continued-- | | | | |
| The closure plan must include: | | | | |
| 1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed. | ✓ | | | |
| 2) An estimate of the maximum inventory of wastes in storage or treatment at any given time. | ✓ | | | |
| 3) Steps to decontaminate facility equipment. | ✓ | | | |
| 4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates. | | | | - closure schedule for land farm not included as of yet. |
| 265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes. | | | | - Must close all containers storage areas. |
| (b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes. | ✓ | | | |
| 265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated. | ✓ | | | |
| 265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.117(a) Post closure care must consist of at least: | | | | |
| 1) Groundwater monitoring | ✓ | | | |
| 2) Maintenance of the contaminant system. | ✓ | | | |
| The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include: | ✓ | | | |
| 1) Groundwater monitoring activities and frequency. | ✓ | | | |
| 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment. | ✓ | | | |
| 265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility. | ✓ | | | |
| 265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste. | ✓ | | | |
| **SUBPART H - FINANCIAL REQUIREMENTS** | | | | |
| 265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs. | ✓ | | | |
| **SUBPART I - OTHER FACILITY STANDARDS** | | | | |
| 265.170 - 265.172 The container must be compatible with the waste to be stored. | ✓ | | | |

Add. ✓
265.143 The owner/operator must maintain a financial assurance for closure/post-closure

| | closure | post closure |
|---|---|---|
| A) Assurance Mechanism | | |
| a) Closure Trust Fund | ___ | ___ |
| b) Surety Bond | ___ | ___ |
| c) Letter of Credit | ___ | ___ |
| d) Closure Insurance | ___ | ___ |
| e) Corporate Guaranty | ___ | ___ |
| B) Amount of Cost | ___ | ___ |

Add.
265.147(e) The owner/operator must maintain current liability [illegible]:
✓ [illegible] ___
Financial Test
[illegible]
[illegible]
[illegible] (M/M)
[illegible]

Not in compliance - No
Not applic le - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.173 Containers holding hazardous waste must be kept closed and must not be opened, handled, or stored in a manner which may cause a rupture or leak. | ✓ | | | Container storage area needs signs + fire extinguishers. |
| 265.174 Areas where containers are stored must be inspected weekly. | ✓ | | | |
| 265.176 Containers holding ignitable or reactive waste must be located at least 15 meters from the facility's property line. | | | ✓ | |
| 265.177(a) Incompatible wastes must not be placed in the same container. | | | ✓ | |
| (b) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby must be separated or protected from the other materials. | | | ✓ | |
| **SUBPART J - TANKS** | | | | |
| 265.192(b) Hazardous waste must be placed in a tank if they could cause the tank or its liner to leak. | | | N/A | |
| (c) Uncovered tanks must have a least two feet of freeboard unless other containment structures, a drainage control system, or other diversion structures with a capacity that equals or exceeds the volume of the top two feet of the tank. | | | | |
| (d) Tanks which have a continuous feed system must be equipped with a means to stop the inflow. | | | ✓ | |

| REQUIREM | Not in compliance - No<br>Not applicab - NA<br>Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a). | | | N/A | |
| 265.194 Tanks must be inspected in accordance with 265.194. | | | | |
| 265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks. | | | | |
| 265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with. | | | | |
| 265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with. | | | | |
| **SUBPART K - SURFACE IMPOUNDMENTS** | | | | |
| 265.222 Must maintain at least two feet of freeboard. | ✓ | | | Need extra signs |
| 265.223 Earthen dikes must have protective cover. | ✓ | | | |
| 265.225 Must conduct waste analyses and trial tests in accordance with 265.225. | ✓ | | | |
| 265.226(1) Must inspect the freeboard level at least once each operating day. | ✓ | | | |
| (2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure. | ✓ | | | |
| 265.228 The surface impoundment must close in accordance with 265.228. | ✓ | | | |

| REQUIREMENT | Not applicable - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| 265.229 Ignitable or reactive waste must not be placed in a surface impoundment unless 265.229 is complied with. | | | ✓ | |
| 265.230 Incompatible wastes must not be placed in the same surface impoundment unless 265.17(b) is complied with. | | | ✓ | |
| **SUBPART L - WASTE PILES** | | | | |
| 265.251 A waste pile must be protected and managed to control wind dispersal. | | | N/A | |
| 265.252 An owner or operator must conduct waste analyses unless the facility meets the exemptions of 265.252. | | | | |
| 265.253 Within one year after the effective date of the regulations, leachate or run-off from a pile must be controlled pursuant to 265.253. | | | | |
| 265.256 Ignitable or reactive waste must not be placed in a waste site unless 265.256 is complied with. | | | | |
| 265.257 The requirements of 265.257 for incompatible wastes must be complied with. | | | ✓ | |
| **SUBPART M - LAND TREATMENT** | | | | |
| 265.272(a) Hazardous waste must not be placed at a land treatment facility unless it can be made less hazardous or non-hazardous. | ✓ | | | Spray field + landfarm need fence repair, Landfarm needs a lock on the gate. Spray field needs to have fence repaired + scrap pile removed. Landfarm needs run-on, run-off control. |
| (b) Run-on must be diverted away from other active portions as of one year after the effective date of Part 265. | ✓ | | | |

Not in compliance - No
Not applica - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.272 -- Continued | | | | |
| (c) Run-off from active portions must be collected as of one year after the effective date of Part 265 . . . | ✓ | | | |
| 265.273 Waste analyses must be conducted pursuant to 265.273. | ✓ | | | |
| 265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility. | | | ✓ | |
| (b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with. | | | ✓ | |
| (c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with. | | | ✓ | |
| 265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278. | | | | No Unsaturated monitoring |
| 265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility. | ✓ | | | |
| 265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280. | ✓ | | | |

In compliance - Yes
Not in compliance - No
Not applicable - NA

| REQUIREMENT | Yes | No | N/A | COMMENTS |
|---|---|---|---|---|
| 265.281 Ignitable or reactive waste must not be placed in a land treatment facility unless 265.281 is complied with. | | | ✓ | |
| 265.282 Incompatible wastes must not be placed in the same land treatment area unless 265.17(b) is complied with. | | | ✓ | |
| **SUBPART N - LANDFILLS** | | | | |
| 265.302(a) Run-on must be diverted away from the active portions within one year after the effective date of Part 265. | | ✓ | | No run-on or run-off a landform. |
| (b) Run-off from active portions must be collected within one year after the effective date of Part 265. | | | ✓ | |
| (d) Must control wind dispersal. | | ✓ | | No control of wind dispersal. |
| 265.309 The owner or operator must meet the surveying and recordkeeping requirements of 265.309. | | | ✓ | |
| 265.310 A landfill must comply with closure and post-closure requirements of 265.310. | ✓ | | | |
| 265.312 Ignitable or reactive waste must not be placed in a landfill unless 265.312 is complied with. | | | ✓ | |
| 265.313 Incompatible wastes must not be placed in a landfill unless 265.17(b) is complied with. | | | ✓ | |
| 265.314 Bulk or non-containerized liquid waste, waste containing free-liquids, or containers holding liquid waste should not be placed in a landfill unless the requirements of 265.314 | | | ✓ | |

| REQUIREMENT | Not applicable - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| 265.315 (i) Empty containers must be reduced in volume as of one year after the effective date of Part 265. | | | ✓ | |
| **SUBPART O - INCINERATORS** | | | | |
| 265.343 Must be at steady state conditions before adding hazardous waste. | | | ✓ | |
| 265.345 Waste analyses must be conducted pursuant to 265.345. | | | ✓ | |
| 265.347 Monitoring and inspections must be conducted as delineated in 265.347. | | | ✓ | |
| 265.351 At closure, the owner or operator must remove all hazardous waste and hazardous waste residues. | | | ✓ | |
| **SUBPART P - THERMAL TREATMENT** | | | | |
| 265.373 Must be at steady state conditions before adding hazardous wastes. | | | ✓ | |
| 265.375 Waste analyses must be conducted pursuant to 265.375. | | | ✓ | |
| 265.377 Monitoring and inspections must be conducted as delineated in 265.377. | | | ✓ | |
| 265.301 At closure, the owner or operator must remove all hazardous waste residues. | | | ✓ | |
| 265.382 Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives | | | ✓ | |

| REQUIREM | Not applicab - NA | | | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| **SUBPART Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT** | | | | |
| 265.401(a) Must comply with 265. 17(b) | | | N/A | |
| (b) Hazardous waste must not be placed in the treatment process or equipment if any failure of equipment or the process would occur. | | | | |
| (c) A continuously-fed process must be equipped with a means to stop the inflow. | | | | |
| 265.402 Waste analyses and trial tests must be conducted pursuant to 265. 402. | | | | |
| 265.403 Inspections must be made pursuant to 265.403. | | | | |
| 265.404 At closure, all hazardous waste and hazardous waste residues must be removed. | | | ✓ | |
| 265.405 Ignitable or reactive waste must not be placed in a treatment process unless 265.405 is complied with. | | | ✓ | |
| 265.406 Incompatible wastes must not be placed in the same treatment process unless 265.17(b) is complied with. | | | ✓ | |
| **SUBPART R - UNDERGROUND INJECTION** | | | ✓ | |
| 265.430(a) underground injection of hazardous waste is not subject to the closure and post-closure or financial requirements of Part 265. Underground injection is subject to the other requirements of Part 265. | | | ✓ | |

| | Not applicat | | - NA | COMMENTS |
|---|---|---|---|---|
| | Yes | No | N/A | |
| Other questions or standards. | | | | |
| Are there any other generators transporting their waste to this hazardous waste management facility? | ✓ | | | Koppers plants in Afl., Cuty, Mo, Pa. [illegible] burned at [illegible] |

a. Koppers will submit a more detailed schedule of events concerning the switch-over from burning hazardous to non-hazardous waste in the boiler.

DB:lr

SCHEDULE FOR WASTEWATER
PRETREATMENT SYSTEM
KOPPERS COMPANY, INC.
TREATED WOOD PRODUCTS
GRENADA, MISSISSIPPI

| | |
|---|---|
| Begin Construction | July 23, 1988 |
| Finish Construction | October 13, 1988 |
| Process Start-up (cease using surface impoundment) | October 19, 1988 |
| Full Operation | November 2, 1988 |

**MEETING AGENDA**

Koppers Company, Inc.

June 15, 1988

1.) Surface Impoundment Permit.

a.) Submittal of schedule for completion of pretreatment system and hook-up to POTW.

b.) Submittal of updated schedule for closure.

c.) Contingency plan for closure if pretreatment system is not permitted or completed by November 8, 1988.

2. Boiler Ash Landfarm.

a.) Review groundwater sampling results.

b.) Closure & Post-Closure requirements.

1) Submittal of updated Part A.

2) Submittal of Part B.

3. Spray Irrigation Field

a.) Review existing data.

b.) Closure & Post-Closure requirements.

1) Submittal of updated Part A

2) Submittal of Part B

4. Unnamed Ditch

a.) Review existing data.

b.) Discuss interim measures for remediating contamination.

5. RFA/RFI for Solid Waste Management Units.

a.) EPA letter and comments

6. Boiler & Boiler ash

EXHIBIT 1

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

## Interoffice Correspondence

| | | | |
|---|---|---|---|
| To | J. D. Clayton | From | D. L. King |
| Location | Grenada, MS | Location | North Little Rock |
| Subject | Waste Profile - CWM, Inc | Date | June 17, 1988 |

Attached is a completed Waste Profile Sheet ( Chemical Waste Management, Inc) for the few drums of Hazardous Waste (U051) presently stored at the Grenada plant. Please review the attached information and proceed as follows:

1) Collect a representative sample (one quart) from these drums and complete the Sample Certification attached to the back of the Profile Sheet, and sign Profile Sheet at the bottom of the first page.

2) Send sample (UPS), and Waste Profile Sheet to: Chemical Waste Management, Inc. , Emelle Facility, P. O. Box 55, Emelle, AL 35459

If you have any questions, please call Rob or me.

Dave

David King

DLK/dlk

cc: R. Anderson

# Chemical Waste Management, Inc.

## GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

*H53977*

H 53977

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

**A. GENERAL INFORMATION**

1. Generator Name: Koppers Co, Inc
2. Generator USEPA ID: MSD007027543
3. Facility Address: P.O. Box 160
   Tie Plant Road
   Tie Plant (Grenada), MS
4. Generator State ID: _____
5. Zip Code: 38960
6. Technical Contact: David King
7. Title: Reg. Envr. Coord
   Keystone Envr. Res
8. Phone: (501) 945-4581

**B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO** 1. ☒ Generating Facility (A, above), or

2. Company Name: _____ 3. Phone: ( ) ___-___
4. Address: _____
5. Zip Code: _____

**C.** 1. NAME OF WASTE Soil, Sand, Rock Contaminated with Creosote

2. PROCESS GENERATING WASTE Wood Preservation SIC 2491

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

**D. PHYSICAL CHARACTERISTICS OF WASTE**

| 1. Color: | 2. Does the waste have a strong incidental odor? | 3. Physical State @ 70°F: | 4. Layers: | 5. Specific Gravity: | 6. Free Liquids: |
|---|---|---|---|---|---|
| Dark Brown | ☒ No ☐ Yes If known, describe: _____ | ☒ Solid ☐ Semi-Solid ☐ Liquid ☐ Powder Other: _____ | ☐ Multilayered ☐ Bi-layered ☒ Single Phased | Range: 1 - 1.3 | ☐ Yes ☒ No Volume: _____ % |

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☒ Range 5 - 9 ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☒ None ☐ Closed Cup ☒ Open Cup

**E. CHEMICAL COMPOSITION**

| 1. | RANGE MIN. - MAX. | |
|---|---|---|
| Creosote | 10 - 90 | % |
| Solids (Soil, Sand, Rock, debris) | 10 - 90 | % |
| Water | 0 - 50 | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |
| | - | % |

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

2. Indicate if this waste contains any of the following:

| | NONE | or LESS THAN | or ACTUAL |
|---|---|---|---|
| PCB's | ☒ | ☐ < 50 ppm | _____ ppm |
| Cyanides | ☐ | ☒ < 50 ppm | _____ ppm |
| Phenolics | ☐ | ☒ < 50 ppm | _____ ppm |
| Sulfides | ☐ | ☒ < 50 ppm | _____ ppm |

**F. METALS** Indicate if this waste contains any of the following:

1. ☐ EP TOX/TCLP or 2. ☒ Total

| METAL | LESS THAN (Parts Per Million) | or | ACTUAL |
|---|---|---|---|
| Arsenic | ☐ < 5 | ☒ < 500 | _____ |
| Barium | ☐ < 100 | | UNK |
| Cadmium | ☐ < 1 | ☒ < 100 | _____ |
| Chromium | ☐ < 5 | | UNK |
| Lead | ☐ < 5 | ☒ < 500 | _____ |
| Mercury | ☐ < 0.2 | ☒ < 20 | _____ |
| Selenium | ☐ < 1 | ☒ < 100 | _____ |
| Silver | ☐ < 5 | | UNK |
| Chromium-Hex | ☐ < 5 | ☒ < 500 | _____ |
| Copper | ☐ < 5 | | _____ |
| Nickel | ☐ < 5 | ☒ < 134 | _____ |
| Thallium | ☐ < 5 | ☐ < 130 | UNK |
| Zinc | ☐ < 5 | | UNK |
| _____ | ☐ < | | _____ |
| _____ | ☐ < | | _____ |
| _____ | ☐ < | | _____ |

# GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

H 53977
Waste Profile Sheet Code

**G. OTHER HAZARDOUS CHARACTERISTICS**

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☒ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☒ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☒ None of the above

**H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION**

| | LESS THAN | or | ACTUAL |
|---|---|---|---|
| Beryllium | ☐ < 5000 ppm | | _____ ppm |
| Potassium | ☐ < 5000 ppm | | _____ ppm |
| Sodium | ☐ < 5000 ppm | | _____ ppm |
| Total Bromine | ☐ < 2 % | | _____ % |
| Total Chlorine | ☐ < 35 % | | _____ % |
| Total Fluorine | ☐ < 1 % | | _____ % |
| Total Sulfur | | | _____ % |

**I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS** Provide if information is available.

1. Heat Value (BTU/lb): _____ Range _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

**J. TRANSPORTATION INFORMATION**

1. Is this a DOT Hazardous Material? ☒ Yes ☐ No 2. Anticipated Annual Volume/Units: 50 drum/yr
3. Proper Shipping Name: RQ Hazardous Waste, Solid, NOS
4. Hazard Class: ORM-B 5. I.D. #: NA 9189
6. Additional Description: ( Contains Creosote )
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum (Type/Size): 55 gal / 17H Other: _____
8. CERCLA Reportable Quantity (RQ): U051 9. RQ Units (lb/kg): 1 lb
10. USEPA Hazardous Waste? ☒ Yes ☐ No 11. USEPA Hazardous Waste Number(s): U051
12. State Hazardous Waste? ☒ Yes ☐ No 13. State Hazardous Waste Number(s): U051

**K. SPECIAL HANDLING INFORMATION** See MSDS for Creosote (attached)

☐ Additional Page(s) Attached

**L. GENERATOR CERTIFICATION** I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. _____ Signature 2. _____ Title

3. _____ Name (Type or Print) 4. _____ Date


Form CWM-6000 © 1987 Chemical Waste Management, Inc.

Chemical Waste
Management, Inc.
P.O. Box 55
Emelle, Al 35459

EMELLE ALA JUN 27 '88

US POSTAGE 0.15

Mail To: KOPPER CO., INC.
P. O. Box 160
Grenada, MS ~~38930~~

Technical Contact: David King

Your Sample, Profile Number MAR-H53977, was received on 06/24/88 at our laboratory. You may expect a disposal decision within two weeks of the receipt date. Please refer to our Lab Number 88-176-12 as well as the Waste Profile Sheet (WPS) number when making inquiries. Thank you.

Faxed 7/11/88
Faxed 7/14/88

CHEMICAL WASTE MANAGEMENT, INC
EMELLE FACILITY
EMELLE AL 35459
205/652-9721

DUE UPON RECEIPT

SERVICE PROVIDED BY:
EMELLE DISPOSAL FACILITY

KOPPERS COMPANY
P.O. BOX 160
TIE PLANT ROAD

GRENADA MS 38960

695 695 5152556

INVOICE NUMBER 52191 06/29/88 1

| VICE | DATE | REFERENCE NO./DESC | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|---|---|---|---|---|
| 26/88 | | SST0088176-12 INITIAL W.S. EVAL. F PO# OR CONTRACT# 0 | | 1.00 | MAR-H53977 | 250.00 |
| | | | | | SUBTOTAL | 250.00 * |

ok to PAY
J. D. Clayton

TTO RESS P O BOX 100285 ATLANTA GA 30384

PLEASE PAY THIS AMOUNT 250.00**

TAX(DISP TAX)-FED TAX(SUPERF ORIGINAL INVOICE

E: 06/27/88

CHEMICAL WASTE MANAGEMENT, INC
WASTE PROFILE SUMMARY

PROFILE : H53977
SALES OFC : MAR
LAB NUMBER: 817612

ENERATOR: KOPPERS
DDL LINE: TIE PLANT RD
DDRESS : P O BOX 160
T/ST : GRENADA
NTACT : DAVID KING
HONE NBR: 501/945-4581

MS 38060

NUMBER : 6955247875
APPROVE : / /
EXPIRATION: / /
LAST LOAD : / /
STATUS : WPS RECEIVED W/SAMPLE
FINALIZED : / /

ASTE NAME: SOIL, SAND, ROCK CONT W/CREOSOTE
NAME: HAZARDOUS WASTE SOLID, NOS

(U051) RQ

*******CHEMICAL COMPOSITION*********

| | |
|---|---|
| REOSOTE | 10- 90 |
| OLIDS (SOIL, SAND, ROCK, DEBRIS) | 10- 90 |
| ATER | 0- 50 |
| IST, BLACK DIRT, SAWDUST, | - |
| ROCKS | - |
| SOL. & NON-REACT W/H20 | - |
| | - |
| | - |
| | - |
| | - |
| | - |

PHYSICAL STATE : SOLID
FLASH POINT : 140-199 OPEN CUP
PH : 4-7
PER. TAXABLE : 0
TREATMENT CODES: NTC
FEDERAL CODES : U051

STATE CODES :
FEDERAL EPA ID : MSD007027543
STATE EPA ID :
EPA PERMIT NO. :
EPA EXPIRATION : / /
CWM CODE : 600
MATERIAL CLASS :
DOT UN/NA NBR. : NA9189

*****DOT PROPERTIES*******

| | |
|---|---|
| NHALATION | REACTIVITY |
| ERMAL | ORAL |
| AMMABLE | HEALTH |

*********METALS - TOTAL

| | | | |
|---|---|---|---|
| SENIC | < 500 | ppm | ZINC |
| RIUM | UNK | ppm | COPPER |
| DMIUM | < 100 | ppm | CHROM HEX |
| ROMIUM | UNK | ppm | SILVER |
| AD | < 500 | ppm | |
| RCURY | < 20 | ppm | |
| ENIUM | < 100 | ppm | |
| KEL | < 134 | ppm | |
| LLIUM | UNK | ppm | |

********** **ADDITIONAL ANALYTICAL INFO.**

| | | | |
|---|---|---|---|
| UNK | ppm | COLOR | : BROWN |
| UNK | ppm | LAYERS | : SINGLE PHASED |
| < 500 | ppm | SPEC GRAV | : 1.1 - 1.19 |
| UNK | ppm | ODOR | : NONE |
| | ppm | FREE LIQ | : NO |
| | ppm | CYANIDES | : < 50 |
| | ppm | SULFIDES | : < 50 |
| | ppm | PCB'S | : NONE |
| | | PHENOLICS | : < 50 |

DLING

CIAL
DLING
TION

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

RECEIVED
JUN 14 1988
Dept. of Natural Resources
Bureau of Pollution Control

June 10, 1988

CERTIFIED MAIL
Return Receipt
Requested

Mr. James Hardage
Mississippi Department of Natural Resources
Bureau of Pollution Control
2380 HGW 80 West
Jackson, MI 39204

Re: Koppers Company, Inc.
Grenada, Mississippi
#MSD007027543

Dear Mr. Hardage:

I have enclosed a copy of a RCRA closure plan for the spray irrigation system at the referenced plant. Please be advised that Koppers Company, Inc. continues to take the position that spray irrigation fields at wood treating plants are not regulated hazardous waste units under the Resource Conservation and Recovery Act, as amended ("RCRA"), and similar state statutes. Although Koppers is submitting this plan which addresses the sprayfield, we expressly reserve all rights to contest the classification of the sprayfield as a RCRA unit. This submission shall not be construed, or deemed to be, an admission by Koppers that the referenced sprayfield is subject to RCRA.

Please feel free to call me if you have any questions or comments concerning this closure plan.

Yours truly,

David R. Kerschner for

Robert J. Anderson
Staff Program Manager
Koppers Treated Wood Products

DIRECT DIAL #
412-227-2683

RJA/cr
Enclosure

cc: J. Batchelder
J. D. Clayton
MC Central Files
J. Blundon (w/o enclosure)

DIVISION OF SOLID WASTE
REVIEWED BY
DATE
COMMENTS sent to
EPA 6-24-88

# CLOSURE PLAN
# TREATED WASTEWATER SPRAYFIELD
# KOPPERS COMPANY, INC.
# GRENADA, MISSISSIPPI

## I. FACILITY/CONTACT INFORMATION

| | |
|---|---|
| OWNER/OPERATORS NAME: | Koppers Company, Inc. |
| EPA FACILITY ID#: | MSD007027543 |
| ADDRESS: | P.O. Box 160<br>Grenada, MS 38960 |
| PHONE NUMBER: | (601) 226-4584 |

CONTACTS:

Koppers Grenada, Mississippi Plant Contacts

J. D. Clayton, Plant Manager
(601) 226-4584

Keystone Environmental Resources Department Contacts

Robert J. Anderson, Staff Program Manager
(412) 227-2683

## II. GENERAL

This closure plan is being submitted in accordance with U.S. EPA and applicable state regulations. Koppers Company, Inc. takes the position that spray irrigation fields at wood treating plants are not regulated hazardous waste units under the Resource Conservation and Recovery Act, as amended ("RCRA"), and similar state statutes. Although Koppers is submitting this plan, which addressed the sprayfield at the plant, we expressly reserve all rights to contest the classification of the sprayfield as a RCRA unit. This submission shall not be construed, or deemed to be, an admission by Koppers that the sprayfield is subject to RCRA.

## III. BACKGROUND INFORMATION CONCERNING THE SPRAYFIELD

The sprayfield covers an area of approximately 6 acres, and is vegetated with natural grasses. (See Attachment (1) for location). Historically, the sprayfield was used as a final treatment step for pretreated wastewater; hazardous waste was never applied to the sprayfield. The sprayfield was listed as a hazardous waste unit handling K001 sludge as a protective filing as part of Koppers' Part B permit

application at the direction of U.S. EPA. As a result, the constituents of interest are those listed in 40CFR261, Appendix VII, for K001 hazardous waste.

## IV. RATIONALE FOR CLOSURE OF THE SPRAYFIELD

Because the sprayfield was operated to biodegrade any remaining organic constituents in pretreated wastewater, and did not receive hazardous wastes per se, the closure process will entail ceasing use of the sprayfield and allowing natural biodegradation to reduce concentrations of residual organic constituents to levels below levels of human health or environmental concern, pursuant to 53FR9944. The achievement of this goal will demonstrate that clean closure has been accomplished.

## V. METHOD OF CLOSURE

A. Following surface impoundment closure, use of the sprayfield will be discontinued.

B. A source of potable water will be connected to the spray irrigation system, and the sprayfield will be operated for eight hours to flush any residual wastewater from the distribution lines and spray heads.

C. The spray irrigation system will be disassembled.

D. The sprayfield will be fertilized as necessary and mowed periodically to promote vegetative growth and biodegradation of residual organic constituents. If necessary, the field will be plowed and disced to further promote biodegradation.

E. After 180 days of operation, soil samples will be collected from 0 to 1.5 feet in depth at four locations within the sprayfield. These samples will be analyzed for Appendix VII K001 constituents following SW-846 methods. Results will be evaluated to determine if K001 constituents are present at or above levels of human health or environmental concern. This evaluation will be presented as part of the engineer's certification of closure. In the event that clean closure cannot be certified at that time, Koppers will submit an amended closure plan specifying either 1). continued activities necessary to accomplish clean closure, or 2). activities necessary for closure with waste constituents in place.

## VI. DECONTAMINATION AND SAFETY PROCEDURES

A. All workers shall observe the safety procedures for handling K001 hazardous waste as presented in the plant's Contingency Plan and Personnel Training

documentation, as included in the Part B permit application, and in accordance with the applicable regulations. At a minimum, workers will wear coveralls, gloves, and boots. Due to the method of closure, no activities requiring equipment decontamination will be conducted.

## VII. DOCUMENTATION

Certification of closure will be submitted to the state and U.S. EPA by Koppers and the state-registered professional engineer within 60 days of conmpletion of closure. Certification will include a report of the findings from the subsoil quality investigation.

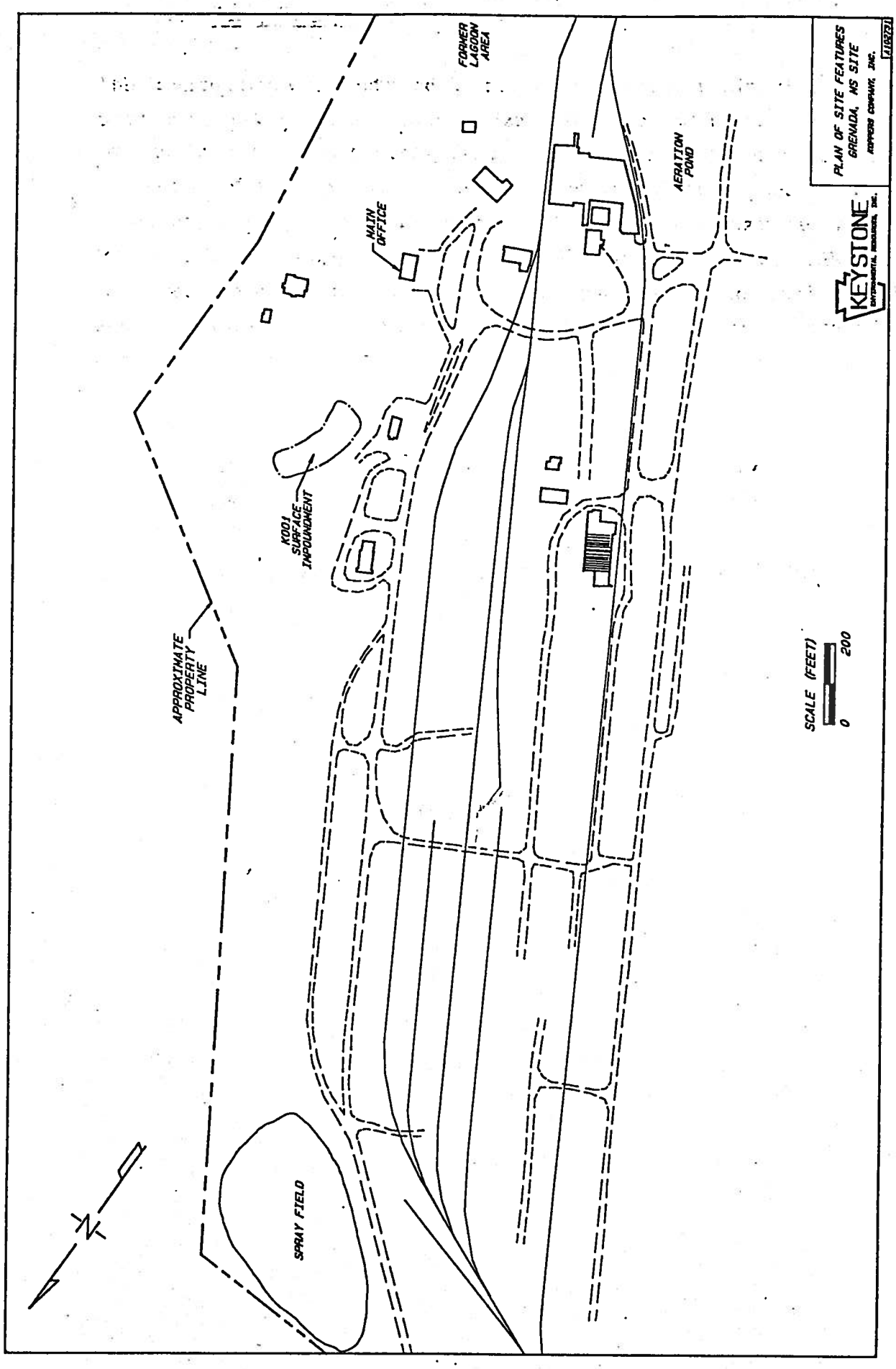
## VIII. SCHEDULE

A. Schedules of closure activities and related activities are detailed in Attachment (2). Attachment (2) includes in the schedule the final closure of the surface impoundment system; sprayfield closure cannot be initiated until this activity is completed.

## IX. CLOSURE COST ESTIMATE

| | | |
|---|---|---|
| 1. | Potable water connection, labor and materials | $ 400 |
| 2. | Flush irrigation system 1 day @ $200 | 200 |
| 3. | Dismantle irrigation system; 30 man-days @ $200 | 6,000 |
| 4. | Fertilize and periodic mowing | 400 |
| 5. | Soil sampling; 1 man-day @ $300 | 300 |
| 6. | Soil analysis; 4 @ $750 | 3,000 |
| 7. | Data evaluation; 16 hrs @ $60 | 960 |
| 8. | Engineer's certification; 16 hrs @ $100 | 1,600 |
| | Subtotal | $12,860 |
| | Administration Costs (10%) | 1,290 |
| | Contingency Costs (10%) | 1,290 |
| TOTAL ESTIMATED COST | | $15,440 |

# ATTACHMENT (1) - LOCATION MAP



ATTACHMENT (2)

SPRAYFIELD CLOSURE SCHEDULE

| Activity | Completion Day |
|---|---|
| Completion of Impoundment Closure | -0- |
| Flush irrigation system with potable water | + 10 |
| Dismantle irrigation system | + 30 |
| Fertilize/Mow periodically | +179 |
| Sample soil | +180 |
| Receive analytical results | +240 |
| Certify closure | +300 |

404) 546 [illegible] 546-3326 Recd. June 10, 1989

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 0 9 1989

4WD-RCRA

Mr. Sam Mabry, Director
Hazardous Waste Division
Bureau of Pollution Control
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Attn: David Bockelmann

Dear Mr. Mabry:

Enclosed please find the draft results of the analysis of samples collected at Koppers Inc., as requested by Mr. David Bockelmann. These results are not final and are therefore subject to QA/QC.

If you have any questions, please contact Hugh Hazen or Karen McKinney at (404) 347-7603.

Sincerely,

Allan E. Antley

Allan E. Antley
RCRA Branch
Waste Compliance Section

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 05/28/88

SUBJECT: Results of Extractable Organic Analysis;
88-173 KOPPERS
GRENADA MS

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: DOUG LAIR

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

RECEIVED
JUN 01 88
SOLID WASTE SECTION

RECEIVED
JUN 3 1 1988

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/27/88

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25598 SAMPLE TYPE: SEDIM
SOURCE: KOPPERS
STATION ID: SS-4 SPRAYFIELD EASTERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1330 STOP: 00/00/00

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 53000U | BIS(2-CHLOROETHYL) ETHER |
| 53000U | BIS(2-CHLOROISOPROPYL) ETHER |
| 53000U | N-NITROSODI-N-PROPYLAMINE |
| 53000U | HEXACHLOROETHANE |
| 53000U | NITROBENZENE |
| 53000U | ISOPHORONE |
| 53000U | BIS(2-CHLOROETHOXY) METHANE |
| 53000U | 1,2,4-TRICHLOROBENZENE |
| 53000U | NAPHTHALENE |
| 53000U | 4-CHLOROANILINE |
| 53000U | HEXACHLOROBUTADIENE |
| 53000U | 2-METHYLNAPHTHALENE |
| 53000U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 53000U | 2-CHLORONAPHTHALENE |
| 53000U | 2-NITROANILINE |
| 53000U | DIMETHYL PHTHALATE |
| 53000U | ACENAPHTHYLENE |
| 53000U | 2,6-DINITROTOLUENE |
| 53000U | 3-NITROANILINE |
| 7900J | ACENAPHTHENE |
| 53000U | DIBENZOFURAN |
| 53000U | 2,4-DINITROTOLUENE |
| 53000U | DIETHYL PHTHALATE |
| 53000U | FLUORENE |
| 53000U | 4-CHLOROPHENYL PHENYL ETHER |
| 53000U | 4-NITROANILINE |
| 53000U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 53000U | 4-BROMOPHENYL PHENYL ETHER |
| 53000U | HEXACHLOROBENZENE (HCB) |
| 17000J | PHENANTHRENE |
| 53000U | ANTHRACENE |
| 53000U | DI-N-BUTYLPHTHALATE |

***REMARKS***

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 18000J | FLUORANTHENE |
| 12000J | PYRENE |
| 53000U | BENZYL BUTYL PHTHALATE |
| 53000U | 3,3'-DICHLOROBENZIDINE |
| 53000U | BENZO(A)ANTHRACENE |
| 53000U | CHRYSENE |
| 53000U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 53000U | DI-N-OCTYLPHTHALATE |
| 53000U | BENZO(B AND/OR K)FLUORANTHENE |
| 53000U | BENZO-A-PYRENE |
| 53000U | INDENO (1,2,3-CD) PYRENE |
| 53000U | DIBENZO(A,H)ANTHRACENE |
| 53000U | BENZO(GHI)PERYLENE |
| 53000U | PHENOL |
| 53000U | 2-CHLOROPHENOL |
| 110000U | BENZYL ALCOHOL |
| 53000U | 2-METHYLPHENOL |
| 53000U | (3-AND/OR 4-)METHYLPHENOL |
| 53000U | 2-NITROPHENOL |
| 53000U | 2,4-DIMETHYLPHENOL |
| 110000U | BENZOIC ACID |
| 53000U | 2,4-DICHLOROPHENOL |
| 53000U | 4-CHLORO-3-METHYLPHENOL |
| 53000U | 2,4,6-TRICHLOROPHENOL |
| 53000U | 2,4,5-TRICHLOROPHENOL |
| 110000U | 2,4-DINITROPHENOL |
| 110000U | 4-NITROPHENOL |
| 53000U | 2,3,4,6-TETRACHLOROPHENOL |
| 110000U | 2-METHYL-4,6-DINITROPHENOL |
| 100000J | PENTACHLOROPHENOL |
| 40 | PERCENT MOISTURE |

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/27/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25598 SAMPLE TYPE: SEDIM
SOURCE: KOPPERS
STATION ID: SS-4 SPRAYFIELD EASTERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1330 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| N | UG/KG | PETROLEUM PRODUCT | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/27/88

** PROJECT NO. 88-173 SAMPLE NO. 25597 SAMPLE TYPE: SEDIM
** SOURCE: KOPPERS
** STATION ID: SS-3 ASHFILL LANDFARM SOUTHERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1230 STOP: 00/00/00

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 39000U | BIS(2-CHLOROETHYL) ETHER |
| 39000U | BIS(2-CHLOROISOPROPYL) ETHER |
| 39000U | N-NITROSODI-N-PROPYLAMINE |
| 39000U | HEXACHLOROETHANE |
| 39000U | NITROBENZENE |
| 39000U | ISOPHORONE |
| 39000U | BIS(2-CHLOROETHOXY) METHANE |
| 39000U | 1,2,4-TRICHLOROBENZENE |
| 39000U | NAPHTHALENE |
| 39000U | 4-CHLOROANILINE |
| 39000U | HEXACHLOROBUTADIENE |
| 39000U | 2-METHYLNAPHTHALENE |
| 39000U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 39000U | 2-CHLORONAPHTHALENE |
| 39000U | 2-NITROANILINE |
| 39000U | DIMETHYL PHTHALATE |
| 39000U | ACENAPHTHYLENE |
| 39000U | 2,6-DINITROTOLUENE |
| 39000U | 3-NITROANILINE |
| 39000U | ACENAPHTHENE |
| 39000U | DIBENZOFURAN |
| 39000U | 2,4-DINITROTOLUENE |
| 39000U | DIETHYL PHTHALATE |
| 39000U | FLUORENE |
| 39000U | 4-CHLOROPHENYL PHENYL ETHER |
| 39000U | 4-NITROANILINE |
| 39000U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 39000U | 4-BROMOPHENYL PHENYL ETHER |
| 39000U | HEXACHLOROBENZENE (HCB) |
| 7400J | PHENANTHRENE |
| 26000J | ANTHRACENE |
| 39000U | DI-N-BUTYLPHTHALATE |

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 210000 | FLUORANTHENE |
| 170000 | PYRENE |
| 39000U | BENZYL BUTYL PHTHALATE |
| 39000U | 3,3'-DICHLOROBENZIDINE |
| 37000J | BENZO(A)ANTHRACENE |
| 45000 | CHRYSENE |
| 39000U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 39000U | DI-N-OCTYLPHTHALATE |
| 52000 | BENZO(B AND/OR K)FLUORANTHENE |
| 15000J | BENZO-A-PYRENE |
| 6400J | INDENO (1,2,3-CD) PYRENE |
| 39000U | DIBENZO(A,H)ANTHRACENE |
| 5300J | BENZO(GHI)PERYLENE |
| 39000U | PHENOL |
| 39000U | 2-CHLOROPHENOL |
| 78000U | BENZYL ALCOHOL |
| 39000U | 2-METHYLPHENOL |
| 39000U | (3-AND/OR 4-)METHYLPHENOL |
| 39000U | 2-NITROPHENOL |
| 39000U | 2,4-DIMETHYLPHENOL |
| 78000U | BENZOIC ACID |
| 39000U | 2,4-DICHLOROPHENOL |
| 39000U | 4-CHLORO-3-METHYLPHENOL |
| 39000U | 2,4,6-TRICHLOROPHENOL |
| 39000U | 2,4,5-TRICHLOROPHENOL |
| 78000U | 2,4-DINITROPHENOL |
| 78000U | 4-NITROPHENOL |
| 39000U | 2,3,4,6-TETRACHLOROPHENOL |
| 78000U | 2-METHYL-4,6-DINITROPHENOL |
| 20000J | PENTACHLOROPHENOL |
| 16 | PERCENT MOISTURE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT 05/27/88

PROJECT NO. 88-173 SAMPLE NO. 25597 SAMPLE TYPE: SEDIM
SOURCE: KOPPERS
STATION ID: SS-3 ASHFILL LANDFARM SOUTHERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1230 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 7000JN | UG/KG | DIMETHYLBIPHENYL |
| 30000JN | UG/KG | CYCLOPENTYLPHENANTHRENE |
| 10000JN | UG/KG | PHENYLISOQUIOLINE |
| 10000JN | UG/KG | BENZOFLUORENE |
| 9000JN | UG/KG | BENZONAPHTHOTHIOPHENE |

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 20000JN | UG/KG | METHYLPHENANTHRENE(3 ISOMERS) |
| 30000JN | UG/KG | DIMETHYLPHENANTHRENE(4 ISOMERS) |
| 10000JN | UG/KG | BENZONAPHTHOFURAN |
| 40000JN | UG/KG | METHYLFLUORANTHENE(4 ISOMERS) |
| 5000JN | UG/KG | METHYLBENZANTHRACENE |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/27/88

** PROJECT NO. 88-173 SAMPLE NO. 25596. SAMPLE TYPE: SEDIM
** SOURCE: KOPPERS
** STATION ID: SS-2 ASHFILL LANDFARM NORTHERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1230 STOP: 00/00/00

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 7800U | BIS(2-CHLOROETHYL) ETHER |
| 7800U | BIS(2-CHLOROISOPROPYL) ETHER |
| 7800U | N-NITROSODI-N-PROPYLAMINE |
| 7800U | HEXACHLOROETHANE |
| 7800U | NITROBENZENE |
| 7800U | ISOPHORONE |
| 7800U | BIS(2-CHLOROETHOXY) METHANE |
| 7800U | 1,2,4-TRICHLOROBENZENE |
| 2500J | NAPHTHALENE |
| 7800U | 4-CHLOROANILINE |
| 7800U | HEXACHLOROBUTADIENE |
| 7800U | 2-METHYLNAPHTHALENE |
| 7800U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 7800U | 2-CHLORONAPHTHALENE |
| 7800U | 2-NITROANILINE |
| 7800U | DIMETHYL PHTHALATE |
| 2700J | ACENAPHTHYLENE |
| 7800U | 2,6-DINITROTOLUENE |
| 7800U | 3-NITROANILINE |
| 7800U | ACENAPHTHENE |
| 1000J | DIBENZOFURAN |
| 7800U | 2,4-DINITROTOLUENE |
| 7800U | DIETHYL PHTHALATE |
| 2200J | FLUORENE |
| 7800U | 4-CHLOROPHENYL PHENYL ETHER |
| 7800U | 4-NITROANILINE |
| 7800U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 7800U | 4-BROMOPHENYL PHENYL ETHER |
| 7800U | HEXACHLOROBENZENE (HCB) |
| 12000 | PHENANTHRENE |
| 19000 | ANTHRACENE |
| 7800U | DI-N-BUTYLPHTHALATE |

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 25000 | FLUORANTHENE |
| 31000 | PYRENE |
| 7800U | BENZYL BUTYL PHTHALATE |
| 7800U | 3,3'-DICHLOROBENZIDINE |
| 5800J | BENZO(A)ANTHRACENE |
| 9300 | CHRYSENE |
| 7800U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 7800U | DI-N-OCTYLPHTHALATE |
| 20000 | BENZO(B AND/OR K)FLUORANTHENE |
| 5400J | BENZO-A-PYRENE |
| 2900J | INDENO (1,2,3-CD) PYRENE |
| 900J | DIBENZO(A,H)ANTHRACENE |
| 3200J | BENZO(GHI)PERYLENE |
| 7800U | PHENOL |
| 7800U | 2-CHLOROPHENOL |
| 16000U | BENZYL ALCOHOL |
| 7800U | 2-METHYLPHENOL |
| 7800U | (3-AND/OR 4-)METHYLPHENOL |
| 7800U | 2-NITROPHENOL |
| 7800U | 2,4-DIMETHYLPHENOL |
| 16000U | BENZOIC ACID |
| 7800U | 2,4-DICHLOROPHENOL |
| 7800U | 4-CHLORO-3-METHYLPHENOL |
| 7800U | 2,4,6-TRICHLOROPHENOL |
| 7800U | 2,4,5-TRICHLOROPHENOL |
| 16000U | 2,4-DINITROPHENOL |
| 16000U | 4-NITROPHENOL |
| 7800U | 2,3,4,6-TETRACHLOROPHENOL |
| 16000U | 2-METHYL-4,6-DINITROPHENOL |
| 5400J | PENTACHLOROPHENOL |
| 15 | PERCENT MOISTURE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT 05/27/88

PROJECT NO. 88-173 SAMPLE NO. 25596 SAMPLE TYPE: SEDIM
SOURCE: KOPPERS
STATION ID: SS-2 ASHFILL LANDFARM NORTHERN HALF

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1230 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 1000JN | UG/KG | BIS(DIMETHYLETHYL)METHYLPHENOL |
| 2000JN | UG/KG | METHYLPHENANTHRENE(2 ISOMERS) |
| 1000JN | UG/KG | BENZONAPHTHOFURAN |
| 4000JN | UG/KG | METHYLFLUORANTHENE(3 ISOMERS) |
| 1000JN | UG/KG | BENZONAPHTHOTHIOPHENE |
| 2000JN | UG/KG | CARBAZOLE |
| 3000JN | UG/KG | CYCLOPENTAPHENANTHRENE |
| 5000JN | UG/KG | BENZOFLUORENE(2 ISOMERS) |
| 1000JN | UG/KG | BENZANTHRACENE |
| 3000JN | UG/KG | METHYLBENZANTHRACENE(2 ISOMERS) |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/27/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173   SAMPLE NO. 25594   SAMPLE TYPE: SEDIM   PROG ELEM: RCRA   COLLECTED BY: S MATTHEWS
SOURCE: KOPPERS   CITY: GRENADA   ST: MS
STATION ID: SS-1 SEDIM FROM STREAM   COLLECTION START: 05/05/88 1110   STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 10000JN | UG/KG | INDENE |
| 40000JN | UG/KG | METHYLNAPHTHALENE |
| 8000JN | UG/KG | ETHYLNAPHTHALENE |
| 20000JN | UG/KG | PROPENYLNAPHTHALENE(2 ISOMERS) |
| 8000JN | UG/KG | METHYLFLUORENE |
| 30000JN | UG/KG | CARBAZOLE |
| 30000JN | UG/KG | METHYLPHENANTHRENE(4 ISOMERS) |
| 20000JN | UG/KG | CYCLOPENTAPHENANTHRENE |

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 10000JN | UG/KG | BENZOTHIOPHENE |
| 20000JN | UG/KG | BIPHENYL |
| 60000JN | UG/KG | DIMETHYLNAPHTHALENE(2 ISOMERS) |
| 30000JN | UG/KG | METHYLDIBENZOFURAN(2 ISOMERS) |
| 20000JN | UG/KG | DIBENZOTHIOPHENE |
| 8000JN | UG/KG | PHENYLNAPHTHALENE |
| 20000JN | UG/KG | BENZOFLUORENE(3 ISOMERS) |

***FOOTNOTES***
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/27/88

** PROJECT NO. 88-173 SAMPLE NO. 25583 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: M-1 WELL
**

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1525 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | BIS(2-CHLOROETHYL) ETHER |
| 100U | BIS(2-CHLOROISOPROPYL) ETHER |
| 100U | N-NITROSODI-N-PROPYLAMINE |
| 100U | HEXACHLOROETHANE |
| 100U | NITROBENZENE |
| 100U | ISOPHORONE |
| 100U | BIS(2-CHLOROETHOXY) METHANE |
| 100U | 1,2,4-TRICHLOROBENZENE |
| 100U | NAPHTHALENE |
| 100U | 4-CHLOROANILINE |
| 100U | HEXACHLOROBUTADIENE |
| 100U | 2-METHYLNAPHTHALENE |
| 100U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 100U | 2-CHLORONAPHTHALENE |
| 100U | 2-NITROANILINE |
| 100U | DIMETHYL PHTHALATE |
| 100U | ACENAPHTHYLENE |
| 100U | 2,6-DINITROTOLUENE |
| 100U | 3-NITROANILINE |
| 100U | ACENAPHTHENE |
| 100U | DIBENZOFURAN |
| 100U | 2,4-DINITROTOLUENE |
| 100U | DIETHYL PHTHALATE |
| 100U | FLUORENE |
| 100U | 4-CHLOROPHENYL PHENYL ETHER |
| 100U | 4-NITROANILINE |
| 100U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 100U | 4-BROMOPHENYL PHENYL ETHER |
| 100U | HEXACHLOROBENZENE (HCB) |
| 100U | PHENANTHRENE |
| 100U | ANTHRACENE |
| 100U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | FLUORANTHENE |
| 100U | PYRENE |
| 100U | BENZYL BUTYL PHTHALATE |
| 100U | 3,3'-DICHLOROBENZIDINE |
| 100U | BENZO(A)ANTHRACENE |
| 100U | CHRYSENE |
| 1600J | BIS(2-ETHYLHEXYL) PHTHALATE |
| 100U | DI-N-OCTYLPHTHALATE |
| 100U | BENZO(B AND/OR K)FLUORANTHENE |
| 100U | BENZO-A-PYRENE |
| 100U | INDENO (1,2,3-CD) PYRENE |
| 100U | DIBENZO(A,H)ANTHRACENE |
| 100U | BENZO(GHI)PERYLENE |
| 100U | PHENOL |
| 100U | 2-CHLOROPHENOL |
| 200U | BENZYL ALCOHOL |
| 100U | 2-METHYLPHENOL |
| 100U | (3-AND/OR 4-)METHYLPHENOL |
| 100U | 2-NITROPHENOL |
| 100U | 2,4-DIMETHYLPHENOL |
| 200U | BENZOIC ACID |
| 100U | 2,4-DICHLOROPHENOL |
| 100U | 4-CHLORO-3-METHYLPHENOL |
| 100U | 2,4,6-TRICHLOROPHENOL |
| 100U | 2,4,5-TRICHLOROPHENOL |
| 200U | 2,4-DINITROPHENOL |
| 200U | 4-NITROPHENOL |
| 100U | 2,3,4,6-TETRACHLOROPHENOL |
| 200U | 2-METHYL-4,6-DINITROPHENOL |
| 200U | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/27/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25583 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-1 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1525 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| N | UG/L | PETROLEUM PRODUCT | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/27/88

PROJECT NO. 88-173 SAMPLE NO. 25578 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-10A WELL R-10A

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1200 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | BIS(2-CHLOROETHYL) ETHER |
| 10U | BIS(2-CHLOROISOPROPYL) ETHER |
| 10U | N-NITROSODI-N-PROPYLAMINE |
| 10U | HEXACHLOROETHANE |
| 10U | NITROBENZENE |
| 10U | ISOPHORONE |
| 10U | BIS(2-CHLOROETHOXY) METHANE |
| 10U | 1,2,4-TRICHLOROBENZENE |
| 10U | NAPHTHALENE |
| 10U | 4-CHLOROANILINE |
| 10U | HEXACHLOROBUTADIENE |
| 10U | 2-METHYLNAPHTHALENE |
| 10U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 10U | 2-CHLORONAPHTHALENE |
| 10U | 2-NITROANILINE |
| 10U | DIMETHYL PHTHALATE |
| 10U | ACENAPHTHYLENE |
| 10U | 2,6-DINITROTOLUENE |
| 10U | 3-NITROANILINE |
| 10U | ACENAPHTHENE |
| 10U | DIBENZOFURAN |
| 10U | 2,4-DINITROTOLUENE |
| 10U | DIETHYL PHTHALATE |
| 10U | FLUORENE |
| 10U | 4-CHLOROPHENYL PHENYL ETHER |
| 10U | 4-NITROANILINE |
| 10U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 10U | 4-BROMOPHENYL PHENYL ETHER |
| 10U | HEXACHLOROBENZENE (HCB) |
| 10U | PHENANTHRENE |
| 10U | ANTHRACENE |
| 10U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | FLUORANTHENE |
| 10U | PYRENE |
| 10U | BENZYL BUTYL PHTHALATE |
| 10U | 3,3'-DICHLOROBENZIDINE |
| 10U | BENZO(A)ANTHRACENE |
| 10U | CHRYSENE |
| 10U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 10U | DI-N-OCTYLPHTHALATE |
| 10U | BENZO(B AND/OR K)FLUORANTHENE |
| 10U | BENZO-A-PYRENE |
| 10U | INDENO (1,2,3-CD) PYRENE |
| 10U | DIBENZO(A,H)ANTHRACENE |
| 10U | BENZO(GHI)PERYLENE |
| 10U | PHENOL |
| 10U | 2-CHLOROPHENOL |
| 20U | BENZYL ALCOHOL |
| 10U | 2-METHYLPHENOL |
| 10U | (3-AND/OR 4-)METHYLPHENOL |
| 10U | 2-NITROPHENOL |
| 20U | 2,4-DIMETHYLPHENOL |
| 20U | BENZOIC ACID |
| 10U | 2,4-DICHLOROPHENOL |
| 10U | 4-CHLORO-3-METHYLPHENOL |
| 10U | 2,4,6-TRICHLOROPHENOL |
| 10U | 2,4,5-TRICHLOROPHENOL |
| 20U | 2,4-DINITROPHENOL |
| 20U | 4-NITROPHENOL |
| 10U | 2,3,4,6-TETRACHLOROPHENOL |
| 20U | 2-METHYL-4,6-DINITROPHENOL |
| 20U | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/27/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25578 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-10A WELL R-10A

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1200 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 30JN | UG/L | OCTAMETHYLCYCLOTETRASILOXANE |
| 4JN | UG/L | DODECANOIC ACID |
| 5JN | UG/L | DECAMETHYLCYCLOPENTASILOXANE |
| N | UG/L | PETROLEUM PRODUCT |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT

05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25580 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-10B WELL R-10B

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1135 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | BIS(2-CHLOROETHYL) ETHER |
| 50U | BIS(2-CHLOROISOPROPYL) ETHER |
| 50U | N-NITROSODI-N-PROPYLAMINE |
| 50U | HEXACHLOROETHANE |
| 50U | NITROBENZENE |
| 50U | ISOPHORONE |
| 50U | BIS(2-CHLOROETHOXY) METHANE |
| 50U | 1,2,4-TRICHLOROBENZENE |
| 50U | NAPHTHALENE |
| 50U | 4-CHLOROANILINE |
| 50U | HEXACHLOROBUTADIENE |
| 50U | 2-METHYLNAPHTHALENE |
| 50U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 50U | 2-CHLORONAPHTHALENE |
| 50U | 2-NITROANILINE |
| 50U | DIMETHYL PHTHALATE |
| 50U | ACENAPHTHYLENE |
| 50U | 2,6-DINITROTOLUENE |
| 50U | 3-NITROANILINE |
| 50U | ACENAPHTHENE |
| 50U | DIBENZOFURAN |
| 50U | 2,4-DINITROTOLUENE |
| 50U | DIETHYL PHTHALATE |
| 50U | FLUORENE |
| 50U | 4-CHLOROPHENYL PHENYL ETHER |
| 50U | 4-NITROANILINE |
| 50U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 50U | 4-BROMOPHENYL PHENYL ETHER |
| 50U | HEXACHLOROBENZENE (HCB) |
| 50U | PHENANTHRENE |
| 50U | ANTHRACENE |
| 50U | DI-N-BUTYLPHTHALATE |

***REMARKS***

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | FLUORANTHENE |
| 50U | PYRENE |
| 50U | BENZYL BUTYL PHTHALATE |
| 50U | 3,3'-DICHLOROBENZIDINE |
| 50U | BENZO(A)ANTHRACENE |
| 50U | CHRYSENE |
| 50U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 50U | DI-N-OCTYLPHTHALATE |
| 50U | BENZO(B AND/OR K)FLUORANTHENE |
| 50U | BENZO-A-PYRENE |
| 50U | INDENO (1,2,3-CD) PYRENE |
| 50U | DIBENZO(A,H)ANTHRACENE |
| 50U | BENZO(GHI)PERYLENE |
| 50U | PHENOL |
| 50U | 2-CHLOROPHENOL |
| 100U | BENZYL ALCOHOL |
| 50U | 2-METHYLPHENOL |
| 50U | (3-AND/OR 4-)METHYLPHENOL |
| 50U | 2-NITROPHENOL |
| 50U | 2,4-DIMETHYLPHENOL |
| 100U | BENZOIC ACID |
| 50U | 2,4-DICHLOROPHENOL |
| 50U | 4-CHLORO-3-METHYLPHENOL |
| 50U | 2,4,6-TRICHLOROPHENOL |
| 50U | 2,4,5-TRICHLOROPHENOL |
| 100U | 2,4-DINITROPHENOL |
| 100U | 4-NITROPHENOL |
| 50U | 2,3,4,6-TETRACHLOROPHENOL |
| 100U | 2-METHYL-4,6-DINITROPHENOL |
| 100U | PENTACHLOROPHENOL |

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/26/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25580 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-10B WELL R-10B

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1135 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 30JN | UG/L | OCTAMETHYLCYCLOTETRASILOXANE |
| N | UG/L | PETROLEUM PRODUCT |
| 5JN | UG/L | DECAMETHYLCYCLOPENTASILOXANE |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25582 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-2 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1745 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | BIS(2-CHLOROETHYL) ETHER |
| 100U | BIS(2-CHLOROISOPROPYL) ETHER |
| 100U | N-NITROSODI-N-PROPYLAMINE |
| 100U | HEXACHLOROETHANE |
| 100U | NITROBENZENE |
| 100U | ISOPHORONE |
| 100U | BIS(2-CHLOROETHOXY) METHANE |
| 100U | 1,2,4-TRICHLOROBENZENE |
| 100U | NAPHTHALENE |
| 100U | 4-CHLOROANILINE |
| 100U | HEXACHLOROBUTADIENE |
| 100U | 2-METHYLNAPHTHALENE |
| 100U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 100U | 2-CHLORONAPHTHALENE |
| 100U | 2-NITROANILINE |
| 100U | DIMETHYL PHTHALATE |
| 100U | ACENAPHTHYLENE |
| 100U | 2,6-DINITROTOLUENE |
| 100U | 3-NITROANILINE |
| 100U | ACENAPHTHENE |
| 100U | DIBENZOFURAN |
| 100U | 2,4-DINITROTOLUENE |
| 100U | DIETHYL PHTHALATE |
| 100U | FLUORENE |
| 100U | 4-CHLOROPHENYL PHENYL ETHER |
| 100U | 4-NITROANILINE |
| 100U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 100U | 4-BROMOPHENYL PHENYL ETHER |
| 100U | HEXACHLOROBENZENE (HCB) |
| 100U | PHENANTHRENE |
| 100U | ANTHRACENE |
| 100U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | FLUORANTHENE |
| 100U | PYRENE |
| 100U | BENZYL BUTYL PHTHALATE |
| 100U | 3,3'-DICHLOROBENZIDINE |
| 100U | BENZO(A)ANTHRACENE |
| 100U | CHRYSENE |
| 100U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 100U | DI-N-OCTYLPHTHALATE |
| 100U | BENZO(B AND/OR K)FLUORANTHENE |
| 100U | BENZO-A-PYRENE |
| 100U | INDENO (1,2,3-CD) PYRENE |
| 100U | DIBENZO(A,H)ANTHRACENE |
| 100U | BENZO(GHI)PERYLENE |
| 100U | PHENOL |
| 100U | 2-CHLOROPHENOL |
| 200U | BENZYL ALCOHOL |
| 100U | 2-METHYLPHENOL |
| 100U | (3-AND/OR 4-)METHYLPHENOL |
| 100U | 2-NITROPHENOL |
| 100U | 2,4-DIMETHYLPHENOL |
| 200U | BENZOIC ACID |
| 100U | 2,4-DICHLOROPHENOL |
| 100U | 4-CHLORO-3-METHYLPHENOL |
| 100U | 2,4,6-TRICHLOROPHENOL |
| 100U | 2,4,5-TRICHLOROPHENOL |
| 200U | 2,4-DINITROPHENOL |
| 200U | 4-NITROPHENOL |
| 100U | 2,3,4,6-TETRACHLOROPHENOL |
| 200U | 2-METHYL-4,6-DINITROPHENOL |
| 200U | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT 05/26/88

** PROJECT NO. 88-173 SAMPLE NO. 25582 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: M-2 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1745 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 100JN | UG/L | OCTAMETHYLCYCLOTETRASILOXANE |
| N | UG/L | PETROLEUM PRODUCT |
| 20JN | UG/L | DECAMETHYLCYCLOPENTALSTI OXANE |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25584 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-3 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1715 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | BIS(2-CHLOROETHYL) ETHER |
| 100U | BIS(2-CHLOROISOPROPYL) ETHER |
| 100U | N-NITROSODI-N-PROPYLAMINE |
| 100U | HEXACHLOROETHANE |
| 100U | NITROBENZENE |
| 100U | ISOPHORONE |
| 100U | BIS(2-CHLOROETHOXY) METHANE |
| 100U | 1,2,4-TRICHLOROBENZENE |
| 100U | NAPHTHALENE |
| 100U | 4-CHLOROANILINE |
| 100U | HEXACHLOROBUTADIENE |
| 100U | 2-METHYLNAPHTHALENE |
| 100U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 100U | 2-CHLORONAPHTHALENE |
| 100U | 2-NITROANILINE |
| 100U | DIMETHYL PHTHALATE |
| 100U | ACENAPHTHYLENE |
| 100U | 2,6-DINITROTOLUENE |
| 100U | 3-NITROANILINE |
| 100U | ACENAPHTHENE |
| 100U | DIBENZOFURAN |
| 100U | 2,4-DINITROTOLUENE |
| 100U | DIETHYL PHTHALATE |
| 100U | FLUORENE |
| 100U | 4-CHLOROPHENYL PHENYL ETHER |
| 100U | 4-NITROANILINE |
| 100U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 100U | 4-BROMOPHENYL PHENYL ETHER |
| 100U | HEXACHLOROBENZENE (HCB) |
| 100U | PHENANTHRENE |
| 100U | ANTHRACENE |
| 100U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | FLUORANTHENE |
| 100U | PYRENE |
| 100U | BENZYL BUTYL PHTHALATE |
| 100U | 3,3'-DICHLOROBENZIDINE |
| 100U | BENZO(A)ANTHRACENE |
| 100U | CHRYSENE |
| 100U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 100U | DI-N-OCTYLPHTHALATE |
| 100U | BENZO(B AND/OR K)FLUORANTHENE |
| 100U | BENZO-A-PYRENE |
| 100U | INDENO (1,2,3-CD) PYRENE |
| 100U | DIBENZO(A,H)ANTHRACENE |
| 100U | BENZO(GHI)PERYLENE |
| 100UJ | PHENOL |
| 100UJ | 2-CHLOROPHENOL |
| 200UJ | BENZYL ALCOHOL |
| 100UJ | 2-METHYLPHENOL |
| 100UJ | (3-AND/OR 4-)METHYLPHENOL |
| 100UJ | 2-NITROPHENOL |
| 100UJ | 2,4-DIMETHYLPHENOL |
| 200UJ | BENZOIC ACID |
| 100UJ | 2,4-DICHLOROPHENOL |
| 100UJ | 4-CHLORO-3-METHYLPHENOL |
| 100UJ | 2,4,6-TRICHLOROPHENOL |
| 100UJ | 2,4,5-TRICHLOROPHENOL |
| 200UJ | 2,4-DINITROPHENOL |
| 200UJ | 4-NITROPHENOL |
| 100UJ | 2,3,4,6-TETRACHLOROPHENOL |
| 200UJ | 2-METHYL-4,6-DINITROPHENOL |
| 200UJ | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/26/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25584 SAMPLE TYPE: MONWL PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
SOURCE: KOPPERS CITY: GRENADA ST: MS
STATION ID: M-3 WELL COLLECTION START: 05/03/88 1715 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| N | UG/L | PETROLEUM PRODUCT | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

** PROJECT NO. 88-173 SAMPLE NO. 25585 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-12 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1030 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 200U | BIS(2-CHLOROETHYL) ETHER |
| 200U | BIS(2-CHLOROISOPROPYL) ETHER |
| 200U | N-NITROSODI-N-PROPYLAMINE |
| 200U | HEXACHLOROETHANE |
| 200U | NITROBENZENE |
| 200U | ISOPHORONE |
| 200U | BIS(2-CHLOROETHOXY) METHANE |
| 200U | 1,2,4-TRICHLOROBENZENE |
| 3400 | NAPHTHALENE |
| 200U | 4-CHLOROANILINE |
| 200U | HEXACHLOROBUTADIENE |
| 240 | 2-METHYLNAPHTHALENE |
| 200U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 200U | 2-CHLORONAPHTHALENE |
| 200U | 2-NITROANILINE |
| 200U | DIMETHYL PHTHALATE |
| 200U | ACENAPHTHYLENE |
| 200U | 2,6-DINITROTOLUENE |
| 200U | 3-NITROANILINE |
| 190J | ACENAPHTHENE |
| 64J | DIBENZOFURAN |
| 200U | 2,4-DINITROTOLUENE |
| 200U | DIETHYL PHTHALATE |
| 28J | FLUORENE |
| 200U | 4-CHLOROPHENYL PHENYL ETHER |
| 200U | 4-NITROANILINE |
| 200U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 200U | 4-BROMOPHENYL PHENYL ETHER |
| 200U | HEXACHLOROBENZENE (HCB) |
| 200U | PHENANTHRENE |
| 200U | ANTHRACENE |
| 200U | DI-N-BUTYLPHTHALATE |

***REMARKS***

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 200U | FLUORANTHENE |
| 200U | PYRENE |
| 200U | BENZYL BUTYL PHTHALATE |
| 200U | 3,3'-DICHLOROBENZIDINE |
| 200U | BENZO(A)ANTHRACENE |
| 200U | CHRYSENE |
| 200U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 200U | DI-N-OCTYLPHTHALATE |
| 200U | BENZO(B AND/OR K)FLUORANTHENE |
| 200U | BENZO-A-PYRENE |
| 200U | INDENO (1,2,3-CD) PYRENE |
| 200U | DIBENZO(A,H)ANTHRACENE |
| 200U | BENZO(GHI)PERYLENE |
| 120J | PHENOL |
| 200U | 2-CHLOROPHENOL |
| 400U | BENZYL ALCOHOL |
| 590 | 2-METHYLPHENOL |
| 1900 | (3-AND/OR 4-)METHYLPHENOL |
| 200U | 2-NITROPHENOL |
| 2200 | 2,4-DIMETHYLPHENOL |
| 400U | BENZOIC ACID |
| 200U | 2,4-DICHLOROPHENOL |
| 200U | 4-CHLORO-3-METHYLPHENOL |
| 200U | 2,4,6-TRICHLOROPHENOL |
| 200U | 2,4,5-TRICHLOROPHENOL |
| 400U | 2,4-DINITROPHENOL |
| 400U | 4-NITROPHENOL |
| 200U | 2,3,4,6-TETRACHLOROPHENOL |
| 400U | 2-METHYL-4,6-DINITROPHENOL |
| 400U | PENTACHLOROPHENOL |

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/26/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25585 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-12 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1030 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 100JN | UG/L | BENZOFURAN |
| 100JN | UG/L | METHYLBENZONITRILE |
| 100JN | UG/L | TETRAHYDRONAPHTHALENE |
| 500JN | UG/L | CHLOROPHENOL (NOT 2-) |
| 70JN | UG/L | TRIMETHYLBICYCLOHEPTANONE |
| 200JN | UG/L | 1-METHYLNAPHTHALENE |
| 100JN | UG/L | DIHYDRONAPHTHALENE |
| 80JN | UG/L | ETHENYLBENZOFURAN |
| 100JN | UG/L | ISOQUINOLINONE |

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 1000JN | UG/L | ETHENYLMETHYLBENZENE (2 ISOMERS) |
| 2000JN | UG/L | DIMETHYLPHENOL (NOT 2,4-) (4 ISOMERS) |
| 200JN | UG/L | BENZOTHIOPHENE |
| 500JN | UG/L | TRIMETHYLPHENOL (5 ISOMERS) |
| 200JN | UG/L | DIHYDROINDENONE |
| 200JN | UG/L | DIHYDROINDENOL (2 ISOMERS) |
| 40JN | UG/L | NAPHTHALENECARBONITRILE |
| 100JN | UG/L | DIHYDROMETHYLINDOLONE |
| 60JN | UG/L | CARBAZOLE |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25586 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-9D WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1130 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | BIS(2-CHLOROETHYL) ETHER |
| 50U | BIS(2-CHLOROISOPROPYL) ETHER |
| 50U | N-NITROSODI-N-PROPYLAMINE |
| 50U | HEXACHLOROETHANE |
| 50U | NITROBENZENE |
| 50U | ISOPHORONE |
| 50U | BIS(2-CHLOROETHOXY) METHANE |
| 50U | 1,2,4-TRICHLOROBENZENE |
| 50U | NAPHTHALENE |
| 50U | 4-CHLOROANILINE |
| 50U | HEXACHLOROBUTADIENE |
| 50U | 2-METHYLNAPHTHALENE |
| 50U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 50U | 2-CHLORONAPHTHALENE |
| 50U | 2-NITROANILINE |
| 50U | DIMETHYL PHTHALATE |
| 50U | ACENAPHTHYLENE |
| 50U | 2,6-DINITROTOLUENE |
| 50U | 3-NITROANILINE |
| 50U | ACENAPHTHENE |
| 50U | DIBENZOFURAN |
| 50U | 2,4-DINITROTOLUENE |
| 50U | DIETHYL PHTHALATE |
| 50U | FLUORENE |
| 50U | 4-CHLOROPHENYL PHENYL ETHER |
| 50U | 4-NITROANILINE |
| 50U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 50U | 4-BROMOPHENYL PHENYL ETHER |
| 50U | HEXACHLOROBENZENE (HCB) |
| 50U | PHENANTHRENE |
| 50U | ANTHRACENE |
| 50U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | FLUORANTHENE |
| 50U | PYRENE |
| 50U | BENZYL BUTYL PHTHALATE |
| 50U | 3,3'-DICHLOROBENZIDINE |
| 50U | BENZO(A)ANTHRACENE |
| 50U | CHRYSENE |
| 50U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 50U | DI-N-OCTYLPHTHALATE |
| 50U | BENZO(B AND/OR K)FLUORANTHENE |
| 50U | BENZO-A-PYRENE |
| 50U | INDENO (1,2,3-CD) PYRENE |
| 50U | DIBENZO(A,H)ANTHRACENE |
| 50U | BENZO(GHI)PERYLENE |
| 50U | PHENOL |
| 50U | 2-CHLOROPHENOL |
| 100U | BENZYL ALCOHOL |
| 50U | 2-METHYLPHENOL |
| 50U | (3-AND/OR 4-)METHYLPHENOL |
| 50U | 2-NITROPHENOL |
| 50U | 2,4-DIMETHYLPHENOL |
| 100U | BENZOIC ACID |
| 50U | 2,4-DICHLOROPHENOL |
| 50U | 4-CHLORO-3-METHYLPHENOL |
| 50U | 2,4,6-TRICHLOROPHENOL |
| 50U | 2,4,5-TRICHLOROPHENOL |
| 100U | 2,4-DINITROPHENOL |
| 100U | 4-NITROPHENOL |
| 50U | 2,3,4,6-TETRACHLOROPHENOL |
| 100U | 2-METHYL-4,6-DINITROPHENOL |
| 100U | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/26/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25586 SAMPLE TYPE: MONWL PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
SOURCE: KOPPERS CITY: GRENADA ST: MS
STATION ID: R-9D WELL COLLECTION START: 05/04/88 1130 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| N | UG/L | PETROLEUM PRODUCT | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25587 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-9 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1300 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | BIS(2-CHLOROETHYL) ETHER |
| 50U | BIS(2-CHLOROISOPROPYL) ETHER |
| 50U | N-NITROSODI-N-PROPYLAMINE |
| 50U | HEXACHLOROETHANE |
| 50U | NITROBENZENE |
| 50U | ISOPHORONE |
| 50U | BIS(2-CHLOROETHOXY) METHANE |
| 50U | 1,2,4-TRICHLOROBENZENE |
| 50U | NAPHTHALENE |
| 50U | 4-CHLOROANILINE |
| 50U | HEXACHLOROBUTADIENE |
| 50U | 2-METHYLNAPHTHALENE |
| 50U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 50U | 2-CHLORONAPHTHALENE |
| 50U | 2-NITROANILINE |
| 50U | DIMETHYL PHTHALATE |
| 50U | ACENAPHTHYLENE |
| 50U | 2,6-DINITROTOLUENE |
| 50U | 3-NITROANILINE |
| 50U | ACENAPHTHENE |
| 50U | DIBENZOFURAN |
| 50U | 2,4-DINITROTOLUENE |
| 50U | DIETHYL PHTHALATE |
| 50U | FLUORENE |
| 50U | 4-CHLOROPHENYL PHENYL ETHER |
| 50U | 4-NITROANILINE |
| 50U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 50U | 4-BROMOPHENYL PHENYL ETHER |
| 50U | HEXACHLOROBENZENE (HCB) |
| 50U | PHENANTHRENE |
| 50U | ANTHRACENE |
| 50U | DI-N-BUTYLPHTHALATE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | FLUORANTHENE |
| 50U | PYRENE |
| 50U | BENZYL BUTYL PHTHALATE |
| 50U | 3,3'-DICHLOROBENZIDINE |
| 50U | BENZO(A)ANTHRACENE |
| 50U | CHRYSENE |
| 50U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 50U | DI-N-OCTYLPHTHALATE |
| 50U | BENZO(B AND/OR K)FLUORANTHENE |
| 50U | BENZO-A-PYRENE |
| 50U | INDENO (1,2,3-CD) PYRENE |
| 50U | DIBENZO(A,H)ANTHRACENE |
| 50U | BENZO(GHI)PERYLENE |
| 50U | PHENOL |
| 50U | 2-CHLOROPHENOL |
| 100U | BENZYL ALCOHOL |
| 50U | 2-METHYLPHENOL |
| 50U | (3-AND/OR 4-)METHYLPHENOL |
| 50U | 2-NITROPHENOL |
| 50U | 2,4-DIMETHYLPHENOL |
| 100U | BENZOIC ACID |
| 50U | 2,4-DICHLOROPHENOL |
| 50U | 4-CHLORO-3-METHYLPHENOL |
| 50U | 2,4,6-TRICHLOROPHENOL |
| 50U | 2,4,5-TRICHLOROPHENOL |
| 100U | 2,4-DINITROPHENOL |
| 100U | 4-NITROPHENOL |
| 50U | 2,3,4,6-TETRACHLOROPHENOL |
| 100U | 2-METHYL-4,6-DINITROPHENOL |
| 100U | PENTACHLOROPHENOL |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

05/26/88

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 88-173 SAMPLE NO. 25587 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-9 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1300 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 50JN | UG/L | OCTAMETHYLCYCLOTETRASILOXANE |
| 6JN | UG/L | (DIMETHYLETHYL)METHYLPHENOL |
| 6JN | UG/L | DECAMETHYLCYCLOPENTASILOXANE |
| N | UG/L | PETROLEUM PRODUCT |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25588 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-8B WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1600 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | BIS(2-CHLOROETHYL) ETHER |
| 50U | BIS(2-CHLOROISOPROPYL) ETHER |
| 50U | N-NITROSODI-N-PROPYLAMINE |
| 50U | HEXACHLOROETHANE |
| 50U | NITROBENZENE |
| 50U | ISOPHORONE |
| 50U | BIS(2-CHLOROETHOXY) METHANE |
| 50U | 1,2,4-TRICHLOROBENZENE |
| 50U | NAPHTHALENE |
| 50U | 4-CHLOROANILINE |
| 50U | HEXACHLOROBUTADIENE |
| 50U | 2-METHYLNAPHTHALENE |
| 50U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 50U | 2-CHLORONAPHTHALENE |
| 50U | 2-NITROANILINE |
| 50U | DIMETHYL PHTHALATE |
| 50U | ACENAPHTHYLENE |
| 50U | 2,6-DINITROTOLUENE |
| 50U | 3-NITROANILINE |
| 50U | ACENAPHTHENE |
| 50U | DIBENZOFURAN |
| 50U | 2,4-DINITROTOLUENE |
| 50U | DIETHYL PHTHALATE |
| 50U | FLUORENE |
| 50U | 4-CHLOROPHENYL PHENYL ETHER |
| 50U | 4-NITROANILINE |
| 50U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 50U | 4-BROMOPHENYL PHENYL ETHER |
| 50U | HEXACHLOROBENZENE (HCB) |
| 50U | PHENANTHRENE |
| 50U | ANTHRACENE |
| 50U | DI-N-BUTYLPHTHALATE |

***REMARKS***

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | FLUORANTHENE |
| 50U | PYRENE |
| 50U | BENZYL BUTYL PHTHALATE |
| 50U | 3,3'-DICHLOROBENZIDINE |
| 50U | BENZO(A)ANTHRACENE |
| 50U | CHRYSENE |
| 50U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 50U | DI-N-OCTYLPHTHALATE |
| 50U | BENZO(B AND/OR K)FLUORANTHENE |
| 50U | BENZO-A-PYRENE |
| 50U | INDENO (1,2,3-CD) PYRENE |
| 50U | DIBENZO(A,H)ANTHRACENE |
| 50U | BENZO(GHI)PERYLENE |
| 50U | PHENOL |
| 50U | 2-CHLOROPHENOL |
| 100U | BENZYL ALCOHOL |
| 50U | 2-METHYLPHENOL |
| 50U | (3-AND/OR 4-)METHYLPHENOL |
| 50U | 2-NITROPHENOL |
| 50U | 2,4-DIMETHYLPHENOL |
| 100U | BENZOIC ACID |
| 50U | 2,4-DICHLOROPHENOL |
| 50U | 4-CHLORO-3-METHYLPHENOL |
| 50U | 2,4,6-TRICHLOROPHENOL |
| 50U | 2,4,5-TRICHLOROPHENOL |
| 100U | 2,4-DINITROPHENOL |
| 100U | 4-NITROPHENOL |
| 50U | 2,3,4,6-TETRACHLOROPHENOL |
| 100U | 2-METHYL-4,6-DINITROPHENOL |
| 100U | PENTACHLOROPHENOL |

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT 05/26/88

PROJECT NO. 88-173 SAMPLE NO. 25588 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-8B WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1600 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| N | UG/L | PETROLEUM PRODUCT | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

S. Mc[illegible]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
COLLEGE STATION RD.
ATHENS, GA. 30613

*****MEMORANDUM******

DATE: 05/13/88

SUBJECT: Results of Purgeable Organic Analysis;
88-173 KOPPERS
GRENADA MS

FROM: Tom B. Bennett, jr.
Chief, Organic Chemistry Section

TO: DOUG LAIR

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

RECEIVED
EPA/REGION IV
JUN 6 3 17 PM '88
COMPLIANCE SECTION

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/12/88

PROJECT NO. 88-173 SAMPLE NO. 25578 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-10A WELL R-10A

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1200 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

** PROJECT NO. 88-173 SAMPLE NO. 25580 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-10B WELL R-10B

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1135 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

** PROJECT NO. 88-173 SAMPLE NO. 25581 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: SF-3 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 0830 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 28J | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

PROJECT NO. 88-173 SAMPLE NO. 25582 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-2 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1745 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

PROJECT NO. 88-173 SAMPLE NO. 25583 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-1 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1525 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

PROJECT NO. 88-173 SAMPLE NO. 25584 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: M-3 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/03/88 1715 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 6.5J | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 57 | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 1.6J | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 0.55J | BENZENE |
| 1600 | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/12/88

** PROJECT NO. 88-173 SAMPLE NO. 25595 SAMPLE TYPE: BLKWA
** SOURCE: KOPPERS
** STATION ID: TB-1 TRIP BLANK

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1120 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | M-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25586 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-9D WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1130 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 7.4J | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25587 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-9 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1300 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25588 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-8B WELL
**

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1600 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 20J | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25589 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-8A WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1610 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 7.6J | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25590 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-6 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1725 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 8.8J | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 9.1J | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT 05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25590 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-6 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1725 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| 200JN | UG/L | DIHYDROINDENE | | | |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25591 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-5 WELL
**

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1825 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 8.0J | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 3.4J | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 16 | ETHYL BENZENE |
| 1.5J | (M- AND/OR P-)XYLENE |
| 1.4J | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT 05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25591 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-5 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1825 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 800JN | UG/L | DIHYDROINDENE |

| RESULTS | UNITS | COMPOUND |
|---|---|---|

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25592 SAMPLE TYPE: AMBWA
** SOURCE: KOPPERS
** STATION ID: SW-1 UPGRAD STREAM

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1000 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 5.0U | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 5.0U | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 5.0U | ETHYL BENZENE |
| 5.0U | (M- AND/OR P-)XYLENE |
| 5.0U | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25593 SAMPLE TYPE: AMBWA
** SOURCE: KOPPERS
** STATION ID: SW-2 DOWNGRAD STREAM

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1100 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 5.0U | CHLOROMETHANE |
| 5.0U | VINYL CHLORIDE |
| 5.0U | BROMOMETHANE |
| 5.0U | CHLOROETHANE |
| 5.0U | TRICHLOROFLUOROMETHANE |
| 5.0U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 100U | ACETONE |
| 50U | CARBON DISULFIDE |
| 5.0U | METHYLENE CHLORIDE |
| 5.0U | TRANS-1,2-DICHLOROETHENE |
| 5.0U | 1,1-DICHLOROETHANE |
| 50U | VINYL ACETATE |
| 5.0U | CIS-1,2-DICHLOROETHENE |
| 5.0U | 2,2-DICHLOROPROPANE |
| 50U | METHYL ETHYL KETONE |
| 5.0U | BROMOCHLOROMETHANE |
| 5.0U | CHLOROFORM |
| 5.0U | 1,1,1-TRICHLOROETHANE |
| 5.0U | 1,1-DICHLOROPROPENE |
| 5.0U | CARBON TETRACHLORIDE |
| 5.0U | 1,2-DICHLOROETHANE |
| 2.3J | BENZENE |
| 5.0U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 5.0U | 1,2-DICHLOROPROPANE |
| 5.0U | DIBROMOMETHANE |
| 5.0U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 10U | CIS-1,3-DICHLOROPROPENE |
| 50U | METHYL ISOBUTYL KETONE |
| 3.0J | TOLUENE |
| 10U | TRANS-1,3-DICHLOROPROPENE |
| 5.0U | 1,1,2-TRICHLOROETHANE |
| 5.0U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 5.0U | 1,3-DICHLOROPROPANE |
| 50U | METHYL BUTYL KETONE |
| 5.0U | DIBROMOCHLOROMETHANE |
| 5.0U | CHLOROBENZENE |
| 10U | 1,1,1,2-TETRACHLOROETHANE |
| 2.3J | ETHYL BENZENE |
| 1.8J | (M- AND/OR P-)XYLENE |
| 0.51J | O-XYLENE |
| 50U | STYRENE |
| 5.0U | BROMOFORM |
| 10U | BROMOBENZENE |
| 5.0U | 1,1,2,2-TETRACHLOROETHANE |
| 10U | 1,2,3-TRICHLOROPROPANE |
| 10U | O-CHLOROTOLUENE |
| 10U | P-CHLOROTOLUENE |
| 10U | 1,3-DICHLOROBENZENE |
| 10U | 1,4-DICHLOROBENZENE |
| 10U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT 05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25593 SAMPLE TYPE: AMBWA PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
SOURCE: KOPPERS CITY: GRENADA ST: MS
STATION ID: SW-2 DOWNGRAD STREAM COLLECTION START: 05/05/88 1100 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND | RESULTS | UNITS | COMPOUND |
|---|---|---|---|---|---|
| 20JN | UG/L | DIHYDROINDENE | | | |

***FOOTNOTES***
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT

05/18/88

PROJECT NO. 88-173 SAMPLE NO. 25585 SAMPLE TYPE: MONWL
SOURCE: KOPPERS
STATION ID: R-12 WELL

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1030 STOP: 00/00/00

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 50U | CHLOROMETHANE |
| 50U | VINYL CHLORIDE |
| 50U | BROMOMETHANE |
| 50U | CHLOROETHANE |
| 50U | TRICHLOROFLUOROMETHANE |
| 50U | 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) |
| 1000U | ACETONE |
| 500U | CARBON DISULFIDE |
| 50U | METHYLENE CHLORIDE |
| 50U | TRANS-1,2-DICHLOROETHENE |
| 50U | 1,1-DICHLOROETHANE |
| 500U | VINYL ACETATE |
| 50U | CIS-1,2-DICHLOROETHENE |
| 50U | 2,2-DICHLOROPROPANE |
| 500U | METHYL ETHYL KETONE |
| 50U | BROMOCHLOROMETHANE |
| 50U | CHLOROFORM |
| 50U | 1,1,1-TRICHLOROETHANE |
| 50U | 1,1-DICHLOROPROPENE |
| 50U | CARBON TETRACHLORIDE |
| 50U | 1,2-DICHLOROETHANE |
| 100J | BENZENE |
| 50U | TRICHLOROETHENE(TRICHLOROETHYLENE) |
| 50U | 1,2-DICHLOROPROPANE |
| 50U | DIBROMOMETHANE |
| 50U | BROMODICHLOROMETHANE |

| UG/L | ANALYTICAL RESULTS |
|---|---|
| 100U | CIS-1,3-DICHLOROPROPENE |
| 500U | METHYL ISOBUTYL KETONE |
| 130 | TOLUENE |
| 100U | TRANS-1,3-DICHLOROPROPENE |
| 50U | 1,1,2-TRICHLOROETHANE |
| 50U | TETRACHLOROETHENE(TETRACHLOROETHYLENE) |
| 50U | 1,3-DICHLOROPROPANE |
| 500U | METHYL BUTYL KETONE |
| 50U | DIBROMOCHLOROMETHANE |
| 50U | CHLOROBENZENE |
| 100U | 1,1,1,2-TETRACHLOROETHANE |
| 210 | ETHYL BENZENE |
| 54 | (M- AND/OR P-)XYLENE |
| 21J | O-XYLENE |
| 500U | STYRENE |
| 50U | BROMOFORM |
| 100U | BROMOBENZENE |
| 50U | 1,1,2,2-TETRACHLOROETHANE |
| 100U | 1,2,3-TRICHLOROPROPANE |
| 100U | O-CHLOROTOLUENE |
| 100U | P-CHLOROTOLUENE |
| 100U | 1,3-DICHLOROBENZENE |
| 100U | 1,4-DICHLOROBENZENE |
| 100U | 1,2-DICHLOROBENZENE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT 05/18/88

** PROJECT NO. 88-173 SAMPLE NO. 25585 SAMPLE TYPE: MONWL
** SOURCE: KOPPERS
** STATION ID: R-12 WELL
**

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/04/88 1030 STOP: 00/00/00

| RESULTS | UNITS | COMPOUND |
|---|---|---|
| 3000JN | UG/L | DIHYDROINDENE |
| 200JN | UG/L | INDENE |

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 0 9 1988

4WD-RCRA

RECEIVED
JUN 10 1988
Dept. of Natural Resources
Bureau of Pollution Control

Mr. Sam Mabry, Director
Hazardous Waste Division
Bureau of Pollution Control
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

100% waste no longer allowed.

Re: Koppers Company, Inc.
Grenada, Mississippi
MSD 007 024 543

Dear Mr. Mabry:

This letter is a follow-up to discussions held during the Mid-Year Review concerning the referenced facility. Included is EPA's position concerning the current compliance situation for three hazardous or solid waste management areas at the facility - the ash landfarm, the spray irrigation field and the unnamed stream which traverses the property. Additionally, EPA's recommendations as to how these areas should be addressed are discussed.

Concerning the ash landfarm, EPA considers this area a regulated land disposal unit containing a listed hazardous waste. The landfarm is therefore subject to applicable closure and post-closure regulations. Closure of this unit should begin immediately. EPA recommends that MSDNR set a closure schedule and final closure date via an administrative order or in the closure plan approval process.

Regarding the spray irrigation field, EPA also considers this to be a regulated land treatment unit containing a listed hazardous waste. EPA recommends that MSDNR require Koppers to begin closure of the unit, regardless of the company's proposed action against EPA. MSDNR should address the closure of the unit as expeditiously as possible.

The last area of concern is the unnamed stream which was addressed in the "Report of Findings - Unnamed Ditch Characterization" prepared by the facility in October 1987. EPA concludes contaminant releases have occurred to the stream from the solid waste management units located near the stream. EPA recommends that Koppers address these releases and implement interim measures to stop these releases until such time as the HSWA permit interim measures are effective.

As stated above EPA recommends that MSDNR require Koppers to address these issues in a timely and appropriate manner. If you have any questions, please contact Hugh Hazen or Karen McKinney at (404) 347-7603.

Sincerely yours,

James H. Scarbrough, P.E.
Chief, RCRA Branch
Waste Management Division

# HAZARDOUS MATERIAL RELEASE REPORT
## MISSISSIPPI EMERGENCY RESPONSE COMMISSION

RECEIVED
MAY 23 1988
Dept. of Natural Resources
Bureau of Pollution Control

**1. Release Location**

Tie Plant MS

County Grenada

**2. Date** 5/16/88

**3. Time** 1158

**4. Company Name**

Koppers Co.

**5. Contact for further information:**

Name: Gary McClelland

Title: General Yard Forman

Address: Box 160 Tie Plant Rd.

City: Tie Plant

State: MS Zip: 38960

Phone: 601-226-4584

**6. Release Information**

a) Name of substance: 60/40 Creosote - Coal Tar

b) NA/UN: _____ CAS: _____ c) Est. Quantity: 2 gal.

d) Date of Release: 5-16-88 e) Time of Release: 1000

f) Duration of Release: 1-Min.

g) Release occurred into ☐ Air ☐ Water ☒ Ground

h) Substance is extremely hazardous ☐ YES ☐ NO
(per list in 40 CFR 355)

**7. Recommended precautions**

**8. Anticipated Health Risks**

**9. Person reporting release:**

Name: Gary McClelland

Title: General Yard Forman

Address: Box 160 Tie Plant Rd.

City: Tie Plant

State: MS Zip: 38960

Phone: 601-226-4584

**10. Notified:**

☐ Pollution Control
☐ Radiological Health

Name: _____

Date: _____ Time: _____

**11. Emergency Action Required:**

☐ None ☐ State ☐ Local

**12. Person taking report:**

Alvin Reynolds

MERC - III - 1 [REV—APR88]

June 9, 1988

Ms. Lisa Stark
Department of Pollution Control
and Ecology
P. O. Box 9583
Little Rock, Arkansas 72209

FILE COPY

Dear Ms. Stark:

Re: Financial Assurance for
Koppers Company, Inc.
Grenada, Mississippi

In your letter of May 3, 1988 you asked certain questions concerning financial assurance for Koppers Company in Grenada, Mississippi. The following are the answers to those questions.

Question 1. Have we agreed with the costs for the closure and post-closure amounts that Koppers has submitted to our agency?

Answer. Yes, we agree with Koppers' current closure and post-closure costs, however, we recognize that these costs are only estimates and may require adjustments.

Question 2. Did we find the costs adequate, and if not, what was the problem with their estimate?

Answer. Koppers has not yet begun closure of their hazardous waste units so there is no way to tell if the estimated costs will be entirely adequate, however, we believe they should be.

Question 3. Did Koppers pass the financial test according to our regulations?

Answer. Yes.

Your letter states that you are attempting to validate all of the cost estimates for Koppers. If possible, we would like you to send us a copy of your results.

If you should have any questions or if you should require any additional information, please contact me at (601) 961-5171.

Sincerely,

David J. Bockelmann
Hazardous Waste Branch

DJB:cm

STATE OF ARKANSAS
DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
8001 NATIONAL DRIVE, P.O. BOX 9583
LITTLE ROCK, ARKANSAS 72209

PHONE: (501) 562-7444

May 3, 1988

RECEIVED
MAY 11 1988
Dept. of Natural Resources
Bureau of Pollution Control

Department of Natural Resources
Bureau of Pollution Control
Division of Solid Waste Management
Post Office Box 10358
Jackson, Mississippi 39209

ATTN: Hazardous Waste Financial Assurance Division

Dear Sir:

The State of Arkansas is reviewing the use of the financial test of Koppers Company, Inc. for closure/post-closure costs. I would request that you take a few minutes of your time to answer a few questions for me.

1. Have you agreed with the costs for the closure and post-closure amounts that Koppers has submitted to your agency? Our records show that for the end of year report for 1987 Koppers showed a total of $1,025,829 for closure of the facility in your state; and a total of $1,285,658 for post-closure of the facility in your state.

2. Did you find the costs adequate, and if not, what was the problem with their estimate?

3. Did Koppers pass the financial test according to your regulations?

The current closure/post-closure costs for the Kopper's facility in Arkansas is $463,930 and $2,208,300 respectively. These costs, which were not reflected accurately in the 1987 financial test, should be used when reviewing any new submissions by the company.

I hope that this is not an inconvience to you, as it will help our Department compare the costs for closure and post-closure for Koppers Company, Inc. in the State of Arkansas. We are attempting to validate all the cost estimates within the next forty-five days and would be glad to share this information with you. If you have any questions, please feel free to contact me.

Sincerely,

Lisa M. Stark

Lisa M. Stark
Administrative Assistant I
Hazardous Waste Division

lms:Ltr172

cc: Karen Deere, Manager, Enforcement Branch, HW Division

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

March 24, 1988 Via FAX
601-961-5190

RECEIVED
MAR 29 1988
Dept. of Natural Resources
Bureau of Pollution Control

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of
Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

With this FAX transmission are copies of revised pages 1 of 5 and 2 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

If you need additional information, please feel free to contact me at (412) 227-2683.

Sincerely,

Robert J. Anderson/CJV

Robert J. Anderson
Staff Program Manager

RJA/CJV/jsw

Enclosures

Please print or type in the unshaded areas only
*(fill-in areas are spaced for elite type, i.e., 12 characters/inch).*

*Form Approved OMB No. 158-S80004*

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER**

F M S D 0 0 7 0 2 7 5 4 3 — T/A: 1

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| C | YR. | MO. | DAY |
|---|---|---|---|
| 8 | 04 | 01 | 01 |

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP — T/A: 1

| LINE NUMBER | A. PROCESS CODE *(from list above)* | B. PROCESS DESIGN CAPACITY 1. AMOUNT *(specify)* | 2. UNIT OF MEASURE *(enter code)* | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE *(from list above)* | B. PROCESS DESIGN CAPACITY 1. AMOUNT | 2. UNIT OF MEASURE *(enter code)* | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S04 | 130,650 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |



CONTINUE ON REVERSE

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Note: III.C. Line 1

650 cubic yards x 201 gal/yd$^3$ = 130,650 gallons

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K 0 5 4 | 900 | P | T 0 3 D 8 0 | |
| X-2 | D 0 0 2 | 400 | P | T 0 3 D 8 0 | |
| X-3 | D 0 0 1 | 100 | P | T 0 3 D 8 0 | |
| X-4 | D 0 0 2 | | | | included with above |



CONTINUE ON PAGE 3

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 05/27/88

PROJECT NO. 88-173 SAMPLE NO. 25594 SAMPLE TYPE: SEDIM
SOURCE: KOPPERS
STATION ID: SS-1 SEDIM FROM STREAM

PROG ELEM: RCRA COLLECTED BY: S MATTHEWS
CITY: GRENADA ST: MS
COLLECTION START: 05/05/88 1110 STOP: 00/00/00

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 45000U | BIS(2-CHLOROETHYL) ETHER |
| 45000U | BIS(2-CHLOROISOPROPYL) ETHER |
| 45000U | N-NITROSODI-N-PROPYLAMINE |
| 45000U | HEXACHLOROETHANE |
| 45000U | NITROBENZENE |
| 45000U | ISOPHORONE |
| 45000U | BIS(2-CHLOROETHOXY) METHANE |
| 45000U | 1,2,4-TRICHLOROBENZENE |
| 170000 | NAPHTHALENE |
| 45000U | 4-CHLOROANILINE |
| 45000U | HEXACHLOROBUTADIENE |
| 59000 | 2-METHYLNAPHTHALENE |
| 45000U | HEXACHLOROCYCLOPENTADIENE (HCCP) |
| 45000U | 2-CHLORONAPHTHALENE |
| 45000U | 2-NITROANILINE |
| 45000U | DIMETHYL PHTHALATE |
| 59000 | ACENAPHTHYLENE |
| 45000U | 2,6-DINITROTOLUENE |
| 45000U | 3-NITROANILINE |
| 45000U | ACENAPHTHENE |
| 48000 | DIBENZOFURAN |
| 45000U | 2,4-DINITROTOLUENE |
| 45000U | DIETHYL PHTHALATE |
| 59000 | FLUORENE |
| 45000U | 4-CHLOROPHENYL PHENYL ETHER |
| 45000U | 4-NITROANILINE |
| 45000U | N-NITROSODIPHENYLAMINE/DIPHENYLAMINE |
| 45000U | 4-BROMOPHENYL PHENYL ETHER |
| 45000U | HEXACHLOROBENZENE (HCB) |
| 170000 | PHENANTHRENE |
| 83000 | ANTHRACENE |
| 45000U | DI-N-BUTYLPHTHALATE |

| UG/KG | ANALYTICAL RESULTS |
|---|---|
| 110000 | FLUORANTHENE |
| 74000 | PYRENE |
| 45000U | BENZYL BUTYL PHTHALATE |
| 45000U | 3,3'-DICHLOROBENZIDINE |
| 19000J | BENZO(A)ANTHRACENE |
| 18000J | CHRYSENE |
| 45000U | BIS(2-ETHYLHEXYL) PHTHALATE |
| 45000U | DI-N-OCTYLPHTHALATE |
| 18000J | BENZO(B AND/OR K)FLUORANTHENE |
| 7400J | BENZO-A-PYRENE |
| 45000U | INDENO (1,2,3-CD) PYRENE |
| 45000U | DIBENZO(A,H)ANTHRACENE |
| 45000U | BENZO(GHI)PERYLENE |
| 45000U | PHENOL |
| 45000U | 2-CHLOROPHENOL |
| 90000U | BENZYL ALCOHOL |
| 45000U | 2-METHYLPHENOL |
| 45000U | (3-AND/OR 4-)METHYLPHENOL |
| 45000U | 2-NITROPHENOL |
| 45000U | 2,4-DIMETHYLPHENOL |
| 90000U | BENZOIC ACID |
| 45000U | 2,4-DICHLOROPHENOL |
| 45000U | 4-CHLORO-3-METHYLPHENOL |
| 45000U | 2,4,6-TRICHLOROPHENOL |
| 45000U | 2,4,5-TRICHLOROPHENOL |
| 90000U | 2,4-DINITROPHENOL |
| 90000U | 4-NITROPHENOL |
| 45000U | 2,3,4,6-TETRACHLOROPHENOL |
| 90000U | 2-METHYL-4,6-DINITROPHENOL |
| 90000U | PENTACHLOROPHENOL |
| 29 | PERCENT MOISTURE |

***REMARKS***

***REMARKS***

***FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

RECEIVED
MAR 29 1988
Dept. of Natural Resources
Bureau of Pollution Control

March 23, 1988

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

I have enclosed a copy of the revised page 1 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

The change brings the volume of work in the impoundment into line with the amount reported on Pages I-2 and I-3 of the November 1986 Closure Plan for the surface impoundment/sprayfield.

If you need any additional information before Friday, March 25, please call my phone number and ask for Chuck Vita.

Thanks for your help.

Very truly yours,

Robert Anderson / bj

Robert Anderson
Staff Program Manager

RA/bj
Enclosure

Please print or type in the unshaded areas only (fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

## I. EPA I.D. NUMBER

| S | | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | S | D | 0 | 0 | 7 | 0 | 2 | 7 | 5 | 4 | 3 | | 1 |

## FOR OFFICIAL USE ONLY

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| C | YR. | MO. | DAY |
|---|---|---|---|
| 8 | 04 | 01 | 01 |

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|
| GALLONS | G |
| LITERS | L |
| CUBIC YARDS | Y |
| CUBIC METERS | C |
| GALLONS PER DAY | U |
| LITERS PER DAY | V |
| TONS PER HOUR | D |
| METRIC TONS PER HOUR | W |
| GALLONS PER HOUR | E |
| LITERS PER HOUR | H |
| ACRE-FEET | A |
| HECTARE-METER | F |
| ACRES | B |
| HECTARES | Q |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

| S | | T/A | C |
|---|---|---|---|
| C | DUP | | 1 |

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S04 | 52,360 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |



CONTINUE ON REVERSE

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

RECEIVED
MAR 18 1988
Dept. of Natural Resources
Bureau of Pollution Control

March 16, 1988

Mr. David J. Bockelmann, Hydrologist
Hazardous Waste Division
Mississippi Department of Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, MS 39204

Re: Koppers Company, Inc.
Grenada, Mississippi Facility
EPA ID No. 007 027 543

Dear Mr. Bockelmann:

Three copies of the groundwater sampling and analysis plan for the ash disposal area at Koppers' Grenada, Mississippi facility are attached. Samples were collected In February 1988 for the first found. A report summarizing the sampling results will be prepared at the end of July 1988.

Please call if you have any questions or comments.

Sincerely,

Robert J. Anderson

Robert J. Anderson
Staff Program Manager
Koppers Treated Wood Products

RJA/cr
Attachments

DIRECT DIAL #
412-227-2683

cc: J. Scarbrough EPA IV
J. D. Clayton
J. R. Batchelder
J. Blundon (w/o attachment)
M. Schlesinger (w/o attachment)

# MEMO

To: Chuck Estes
From: Dave Bockelmann

Re: Indicator constituents (K001) for wood preserving + treating facilities.

The following is a list of K001 constituents which should serve as good indicators of contamination at wood preserving + treating facilities.

| Polynuclear Aromatic Hydrocarbons | Phenolic Compounds |
| --- | --- |
| Napthalene | Pentachlorophenol |
| Acenapthalene | 2,4 Dinitrophenol |
| Fluoranthene | |

Kim Ehret, Don McLaw + I consulted on this list and found that for the wood preserving + treating facilities which we handle that have contaminated groundwater, one or more of the above constituents showed up at significant concentration levels.

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

TO: David J. Bockelmann

COMPANY NAME: Mississippi Department of Natural Resources

COMPANY TELECOPIER NUMBER: 601-961-5190

FROM: Robert J. Anderson, Keystone Environmental Res., Inc.

NUMBER OF PAGES TO FOLLOW: 3

---

IF YOU DO NOT RECEIVE ALL MATERIAL TRANSMITTED, PLEASE CALL US ON: (412) 227-2694.

OUR COPIER NUMBER IS (412) 227-2436. IT IS A PANAFAX UF-600AT.

SENT BY: Joan Williams TIME: 11:00 DATE: 3/24/88

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

March 24, 1988 Via FAX
601-961-5190

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of
Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

With this FAX transmission are copies of revised pages 1 of 5 and 2 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

If you need additional information, please feel free to contact me at (412) 227-2683.

Sincerely,

Robert J. Anderson/CJV

Robert J. Anderson
Staff Program Manager

RJA/CJV/jsw

Enclosures

(Fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER** F M S D 0 0 7 0 2 7 5 4 3 — 1

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: 8 — YR. 0 4 — MO. 0 1 — DAY 0 1

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN: YR. — MO. — DAY

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES – CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | U | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | V | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C — DUP — 1

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S04 | 130,650 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Note: III.C. Line 1

650 cubic yards x 201 gal/yd$^3$ = 130,650 gallons

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.
2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K054 | 900 | P | T03 D80 | |
| X-2 | D002 | 400 | P | T03 D80 | |
| X-3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | included with above |



CONTINUE ON PAGE 3

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

DIVISION OF SOLID WASTE
REVIEWED BY
DATE
COMMENTS Sent to EPA 4-1-88 DJB

March 24, 1988 Via FAX
601-961-5190

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of
Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

With this FAX transmission are copies of revised pages 1 of 5 and 2 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

If you need additional information, please feel free to contact me at (412) 227-2683.

Sincerely,

Robert J. Anderson/CJV

Robert J. Anderson
Staff Program Manager

RJA/CJV/jsw

Enclosures

DIVISION OF SOLID WASTE
REVIEWED BY
DATE
COMMENTS

(Fill-in areas are spaced for elite type, i.e. 12 characters/inch).

FORM 3 RCRA — EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

Form Approved OMB No. 158-S80004

**I. EPA I.D. NUMBER** F M S D 0 0 7 0 2 7 5 4 3

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** (place an "X" below and provide the appropriate date)

[X] 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

[ ] 2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left): 8 | YR. 04 | MO. 01 | DAY 01

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN: YR. | MO. | DAY

**B. REVISED APPLICATION** (place an "X" below and complete Item I above)

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER (barrel, drum, etc.) | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.) | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | E | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S 0 2 | 600 | G | | 5 | | | | |
| X-2 | T 0 3 | 20 | E | | 6 | | | | |
| 1 | S 0 4 | 130,650 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |



CONTINUE ON REVERSE

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Note: III.C. Line 1

650 cubic yards x 201 gal/yd$^3$ = 130,650 gallons

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
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Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K054 | 900 | P | T03 D80 | |
| X-2 | D002 | 400 | P | T03 D80 | |
| X-3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | included with above |

EPA Form 3510-3 (6-80)



CONTINUE ON PAGE 3

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

TO: DAVID BOCKELMANN

COMPANY NAME: MISSISSIPPI DEPT of NATURAL RESOURCE

COMPANY TELECOPIER NUMBER: 601-961-5190

FROM: R J. ANDERSON - KEYSTONE ENVIRON.

NUMBER OF PAGES TO FOLLOW: 2

---

IF YOU DO NOT RECEIVE ALL MATERIAL TRANSMITTED, PLEASE CALL US ON: (412) 227-2694.

OUR COPIER NUMBER IS (412) 227-2436. IT IS A PANAFAX UF-600AT.

SENT BY: _____ TIME: _____ DATE: _____

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

Phone: 412/227-2694 436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219 Fax: 412/227-2436

March 23, 1988

Mr. David J. Bockelmann
Hydrologist
Hazardous Waste Division
Mississippi Department of Natural Resources
Bureau of Pollution Control
Box 10385
2380 Highway 80 West
Jackson, Mississippi 39204

RE: Part A Application
Koppers Grenada, MS Facility

Dear Mr. Bockelmann:

I have enclosed a copy of the revised page 1 of 5 of the Part A Application for Koppers Grenada, Mississippi facility.

The change brings the volume of work in the impoundment into line with the amount reported on Pages I-2 and I-3 of the November 1986 Closure Plan for the surface impoundment/sprayfield.

If you need any additional information before Friday, March 25, please call my phone number and ask for Chuck Vita.

Thanks for your help.

Very truly yours,

Robert Anderson / by

Robert Anderson
Staff Program Manager

RA/bj
Enclosure

Please print or type in the unshaded areas only
*(fill—in areas are spaced for elite type, i.e., 12 characters/inch).*

*Form Approved OMB No. 158-S80004*

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | S | D | 0 | 0 | 7 | 0 | 2 | 7 | 5 | 4 | 3 | 1 |

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| C | YR. | MO. | DAY |
|---|---|---|---|
| 8 | 04 | 01 | 01 |

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.
1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|
| GALLONS | G |
| LITERS | L |
| CUBIC YARDS | Y |
| CUBIC METERS | C |
| GALLONS PER DAY | U |
| LITERS PER DAY | V |
| TONS PER HOUR | D |
| METRIC TONS PER HOUR | W |
| GALLONS PER HOUR | E |
| LITERS PER HOUR | H |
| ACRE-FEET | A |
| HECTARE-METER | F |
| ACRES | B |
| HECTARES | Q |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP 1

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S04 | 52,360 | G | | 7 | | | | |
| 2 | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |



CONTINUE ON REVERSE

TO: Koppers file
FR: Calvin Dam
SUBJ: Notes on regulatory cites regarding air from burning wood chips and K001 wastes mixed in the industrial boiler at Koppers

1. Part 266 - does not address ash or residue from burning a haz. waste for energy production

2. Def of solid waste. (261.2)
(261.2) ash or haz material to be burned not excluded under 261.4(a)
no variance

(c)(2)(A) applies and Table 1 - K001 sludge is a "solid waste"

3. Def of Haz Waste (261.3)
(a)(2)(iv) - material entering the boiler is a haz. waste.

(b)

Question - a wood chips to be used as a fuel for a boiler a solid waste? No - not a "spent material" and not a by product in Table 1.

266.30 haz waste ~~mixed~~ burned for energy rec. is haz waste comb fuel. Mixing haz waste fuel by blending, etc is haz waste fuel.

4. 261.2 (d)(2) (i)(A) could apply except RA would have to issue (or State)
261.1 (b)(2) could apply except RA " " " " something

5. 261.3 (c)(2)(i) does not apply because the mixture of wood chips and K001 sludge is not a haz. waste - it is a haz waste fuel - because the wood chips are not a solid waste, so 261.3(a)(2)(iv) does not apply.

Jim H

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

RECEIVED
MAR 10 1988
Dept. of Natural Resources
Bureau of Pollution Control

March 9, 1988

FEDERAL EXPRESS

Mr. David J. Bockelmann, Hydrologist
Hazardous Waste Division
Mississippi Department of Natural Resources
Bureau of Pollution Control
Box 10385
Jackson, MS 39209

Re: Koppers Company, Inc.,
Grenada, Mississippi Facility
Report of Findings
Sprayfield Characterization
EPA ID No. MSD 007027543

Dear Mr. Bockelmann:

This letter is in response to your January 25, 1988 letter to Mr. J. D. Clayton of Koppers Company regarding comments on the "Report of Findings--Sprayfield Characterization" (April 1987), which was prepared by Keystone Environmental Resources, Inc.

This study was conducted to satisfy item 2 of the Mississippi Commission on Natural Resources Order Number 1208-87. Although this study was performed to demonstrate that K001 sludge has not been applied to the sprayfield, Koppers asserts that sprayfields are not RCRA--regulated hazardous waste management units.

Koppers is challenging EPA's assertion (adopted by MDNR) that sprayfields are RCRA-regulated hazardous waste units on the basis that proper notice and comment rulemaking procedures were not followed by the Agency prior to making this determination. Enclosed for your information is a copy of the notice letter which has been sent to the Agency advising of our intent to file suit if EPA does not agree to alter its position. Accordingly, we have no alternative except to decline to perform the additional sampling or respond to other comments requested in your January 25, 1988 letter until this issue has been resolved.

If you need additional information or have any questions, please call me.

Sincerely,

Robert J. Anderson

Robert J. Anderson
Staff Program Manager

DIRECT DIAL #
412-227-2683

RJA/cr
Enclosure

cc: J. H. Scarbrough, EPA IV
J. R. Batchelder
J. D. Clayton
J. M. Blundon
R. M. Morosky

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

WEIL, GOTSHAL & MANGES
A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

767 FIFTH AVENUE
NEW YORK, N.Y. 10153
(212) 310-8000
TELECOPIER: (212) 310-8007
CABLE: WEGOMA
TELEX: ITT 424281
ITT 423144

1100 ONE MAIN PLACE
DALLAS, TEXAS 75202
(214) 746-7700
TELECOPIER: (214) 746-7777

1615 L STREET, N.W.
WASHINGTON, D.C. 20036
(202) 682-7000
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(202) 857-0940
TELEX: ITT 440045
WRITER'S DIRECT LINE

(202) 682-7210

1600 REPUBLICBANK CENTER
700 LOUISIANA
HOUSTON, TEXAS 77002
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TELEX: ITT 4620144

701 BRICKELL AVENUE
MIAMI, FLORIDA 33131
(305) 577-3100
TELECOPIER: (305) 374-7159

February 26, 1988

VIA MESSENGER

Honorable Lee M. Thomas
Administrator
United States Environmental Protection Agency
401 M Street, S.W.
Room W-1200
Washington, D.C. 10540

Re: Notice of Citizen's Suit

Dear Mr. Thomas:

Pursuant to Section 7002 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6972 and 40 C.F.R. Part 254, the American Wood Preservers Institute ("AWPI") and Koppers Company, Inc. ("Koppers") notify you of their intention to bring suit for failure to perform a nondiscretionary duty under 42 U.S.C. § 6921(b). Briefly stated, EPA is enforcing, by means of an agency memorandum, a new rule which subjects previously unregulated spray irrigation fields managing nonhazardous wastewater to the full panoply of RCRA regulatory requirements for operation or closure of hazardous waste facilities. In so doing, EPA has violated the explicit directives of both RCRA and the Administrative Procedure Act ("APA") by failing to comply with the requirements for designating wastes as hazardous. To subject an entire industry to the staggering costs of RCRA compliance and in some instances enforcement proceedings by dispensing with the procedural safeguards and reasoned inquiry required for such decisions is indefensible.

Accordingly, AWPI and Koppers urge the Agency to halt processing RCRA Part B permits for operation or closure of spray irrigation fields managing nonhazardous wastewater and to dismiss enforcement proceedings seeking to impose

RCRA requirements on operation or closure of such spray fields until completion of a rulemaking proceeding designating wastewater as a hazardous waste. Absent relief from the Agency, we will have no choice but to pursue our claim in the district court.

## Background

### A. EPA Rulemaking

EPA honored the requirements of RCRA and the APA in May 1980, when it first determined through rulemaking that bottom sediment sludge from wood preserving processes that use creosote or pentachlorophenol (hazardous waste No. K001) should be regulated as a hazardous waste, but that the process wastewater from treatment systems of such operations should not. See 45 Fed. Reg. 74,884, 74,889 (1980). Based on this determination, many wood preserving plants lawfully concluded that no RCRA permit was required for the use of spray irrigation fields as the last step in the management of the nonhazardous wastewater.

### B. EPA Memoranda

In total disregard of its 1980 rulemaking, EPA has attempted, through a series of internal memoranda, to abrogate its previous rulemaking on wastewater and instead unilaterally impose RCRA regulation on facilities handling a nonhazardous waste. For example, in November 1984, the Agency issued a memorandum stating that any facility managing wastewater from wood preserving operations, including spray irrigation units, potentially could be subject to the permitting requirement of section 3001 of RCRA.[1] Without any substantiation, EPA baldly asserted that biological action on land similar to that operating in surface impoundments could generate a "biomass material" at these facilities which it presumed to be K001 bottom sediment sludge. In such circumstances, owners of these facilities would be managing a listed hazardous waste and therefore would require a RCRA permit for operation or closure.

---

1. EPA memorandum from John H. Skinner, Director, Office of Solid Waste to James H. Scarbrough, Chief, Residuals Management Branch, Region IV (November 23, 1984).

Moreover, EPA effectively denied companies the opportunity to demonstrate the absence of K001 bottom sediment sludge in a spray irrigation field. Although the November 1984 memorandum ostensibly allowed owners of facilities to demonstrate that no K001 sludge was formed in its spray field, the Agency did not set out an approved methodology by which facilities could do so. Thus, a facility owner could only rebut EPA's regulatory presumption at the whim of the Agency.

Similarly, in July 1985, the Agency issued another memorandum that simply concluded that spray irrigation fields managing wastewater automatically were subject to RCRA regulation.[2] As with the earlier November 1984 memorandum, EPA merely restated its speculative conclusions concerning the presence of biomass/sludge at these fields without any supporting data.

C. EPA Enforcement

EPA has filed enforcement proceedings against several wood preserving companies operating spray irrigation fields based solely on the purported authority of its own memoranda and the unsubstantiated theory articulated therein. Because the memoranda have never been published in the Federal Register, individual wood preserving companies had no prior notice of EPA's reversal and no meaningful opportunity to object or voluntarily comply with the memoranda. Instead, these companies faced protracted litigation and the threat of penalties in order to challenge EPA's illegal rule.

Further compounding this injury, the Agency is processing permit applications for operation or closure of spray irrigation fields, thereby imposing the burden of RCRA compliance costs on these facilities.[3] The process of

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2. EPA memorandum from John H. Skinner, Director, Office of Solid Waste to James H. Scarbrough, Chief, Residuals Management Branch, Region IV (July 17, 1985).

3. While objecting to EPA's assertion of jurisdiction over spray irrigation fields, many wood preserving companies have filed permit applications protectively, to avoid jeopardizing their operations. See section 213(a)(2) of the

obtaining a RCRA hazardous waste permit alone can consume several years and hundreds of thousands of dollars per facility. In addition, facilities could be subject to extensive design and performance requirements for operation and closure, in some instances for a period of at least 30 years beyond their active life. These crushing costs threaten the economic viability of many wood preserving companies. Moreover, failure to comply could result in EPA ordering the facility to shut down.

D. Industry Response

In accordance with RCRA regulations and in response to the uncertainty generated by EPA's memoranda, AWPI filed a petition with EPA on January 10, 1985, seeking reconsideration of the decision to classify spray irrigation fields managing nonhazardous materials as hazardous waste management facilities. The EPA has failed to act on this petition. In 1986, AWPI further requested a meeting with senior officials in the Office of Solid Waste to discuss the regulatory status of spray irrigation fields in the context of EPA's forthcoming rulemaking on the regulation of additional wastes from wood preserving operations. The Agency rejected any such meeting.

AWPI also challenged EPA's enforcement of its illegal memoranda in an administrative proceeding. See, In Re Brown Wood Preserving Company, Inc., RCRA 84-16-R. In that case, Administrative Law Judge Thomas B. Yost found the Agency's attempted regulation of spray irrigation fields illegal and prohibited further enforcement proceedings. In reaching these conclusions, Judge Yost found that (1) the internal agency memoranda, under which EPA asserted jurisdiction over spray irrigation fields managing nonhazardous wastewater, were invalid because the Agency failed to comply with the requirements of RCRA and the APA; and (2) the EPA could not rely on the "undocumented theory" articulated in these memoranda in enforcement proceedings. The EPA's appeal of that decision is pending. Judge Yost,

---

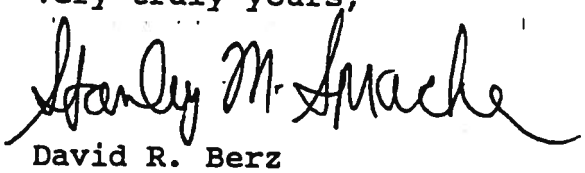
Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. 6925(e)(2). That provision required owners of hazardous waste facilities to submit Part B permit applications by November 8, 1985. Failure to do so could result in the Agency's closing down the facility.

however, has resisted treating his opinion as determinative in cases involving similarly-situated facilities. Furthermore, in light of the Agency's position that owners and operators of spray irrigation fields managing nonhazardous wastewater have an independent obligation to comply with the RCRA permitting process, administrative relief clearly is inadequate.

E. Conclusion

Although the only opinion reviewing EPA's enforcement of the memoranda at issue here has declared the Agency's conduct illegal, EPA persists in relying on these memoranda to impose RCRA regulation for operation or closure on spray irrigation fields managing nonhazardous wastewater to the detriment of the wood preserving industry. Accordingly, we urge the Agency to withdraw these illegal memoranda immediately until completion of a rulemaking concerning the regulation of wastewater as a RCRA hazardous waste.

Very truly yours,



David R. Berz
Stanley M. Spracker

Counsel for AWPI and
Koppers Co., Inc.

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

RECEIVED
MAR 10 1988
Dept. of Natural Resources
Bureau of Pollution Control

March 9, 1988

FEDERAL EXPRESS

OF SOLID WASTE
sent to EPA
3-10-88
NJB

Mr. David J. Bockelmann, Hydrologist
Hazardous Waste Division
Mississippi Department of Natural Resources
Bureau of Pollution Control
Box 10385
Jackson, MS 39209

Re: Koppers Company, Inc.,
Grenada, Mississippi Facility
Report of Findings
Sprayfield Characterization
EPA ID No. MSD 007027543

Dear Mr. Bockelmann:

This letter is in response to your January 25, 1988 letter to Mr. J. D. Clayton of Koppers Company regarding comments on the "Report of Findings--Sprayfield Characterization" (April 1987), which was prepared by Keystone Environmental Resources, Inc.

This study was conducted to satisfy item 2 of the Mississippi Commission on Natural Resources Order Number 1208-87. Although this study was performed to demonstrate that K001 sludge has not been applied to the sprayfield, Koppers asserts that sprayfields are not RCRA--regulated hazardous waste management units.

Koppers is challenging EPA's assertion (adopted by MDNR) that sprayfields are RCRA-regulated hazardous waste units on the basis that proper notice and comment rulemaking procedures were not followed by the Agency prior to making this determination. Enclosed for your information is a copy of the notice letter which has been sent to the Agency advising of our intent to file suit if EPA does not agree to alter its position. Accordingly, we have no alternative except to decline to perform the additional sampling or respond to other comments requested in your January 25, 1988 letter until this issue has been resolved.

If you need additional information or have any questions, please call me.

Sincerely,

Robert J. Anderson

Robert J. Anderson
Staff Program Manager

DIRECT DIAL #
412-227-2683

RJA/cr
Enclosure

cc: J. H. Scarbrough, EPA IV
J. R. Batchelder
J. D. Clayton
J. M. Blundon
R. M. Morosky

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

WEIL, GOTSHAL & MANGES
A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

767 FIFTH AVENUE
NEW YORK, N.Y. 10153
(212) 310-8000
TELECOPIER: (212) 310-8007
CABLE: WEGOMA
TELEX: ITT 424281
ITT 423144

1100 ONE MAIN PLACE
DALLAS, TEXAS 75202
(214) 746-7700
TELECOPIER: (214) 746-7777

1615 L STREET, N.W.
WASHINGTON, D.C. 20036
(202) 682-7000
TELECOPIER (202) 857-0939
(202) 857-0940
TELEX: ITT 440045
WRITER'S DIRECT LINE

(202) 682-7210

1600 REPUBLICBANK CENTER
700 LOUISIANA
HOUSTON, TEXAS 77002
(713) 546-5000
TELECOPIER: (713) 224-9511
TELEX: ITT 4620144

701 BRICKELL AVENUE
MIAMI, FLORIDA 33131
(305) 577-3100
TELECOPIER: (305) 374-7159

February 26, 1988

VIA MESSENGER

Honorable Lee M. Thomas
Administrator
United States Environmental Protection Agency
401 M Street, S.W.
Room W-1200
Washington, D.C. 10540

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Very truly yours,

Stanley M. Spracker

David R. Berz
Stanley M. Spracker

Counsel for AWPI and
Koppers Co., Inc.

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171

FILE COPY

March 4, 1988

Mr. James H. Scarbrough, P. E., Chief
Residuals Managent Branch
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Dear Mr. Scarbrough:

Re: Transmittal of Documents
Received from
Koppers Company, Inc.
Grenada, Mississippi
MSD007027543

Enclosed is the following document for your review:

1.) 1987 Annual RCRA Groundwater Monitoring Summary and accompanying letter addressed to Mr. James Hardage from Mr. Robert J. Anderson, dated February 26, 1988.

If you should have any questions or require any additional information, please contact me at (601) 961-5171.

Sincerely,

David J. Bockelmann
Hazardous Waste Division

DJB:mes

Enclosure

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

February 26, 1988

RECEIVED
FEB 29 1988
Dept. of Natural Resources
Bureau of Pollution Control

Mr. Jim Hardage
Mississippi Department of Natural Resources
Bureau of Pollution Control
P.O. Box 10385
Jackson, MS 39209

Dear Mr. Hardage:

On February 11, 1988, I called you concerning the status of the 1987 Biennial Hazardous Waste Report since our Koppers' Grenada, Mississippi facility had not received these report forms. At that time you informed me that U. S. EPA was late in sending the Biennial forms to the State and the Mississippi DNR was going to extend the reporting deadline to April 1, 1988. Since the Grenada facility had not received the forms as of today, I assume the April 1st filing date is still appropriate. If not please call me at (501) 945-4581.

Sincerely,

David L. King

David L. King
Regional Environmental
Coordinator

I called Dave King & told him that the filing date has been extended to May 1st.
JH
2/29/88

cc. Rob Anderson
J. D. Clayton
Chuck Vita

REGIONAL OFFICE
P.O. Box 15490
North Little Rock, AR 72231

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

February 26, 1988

RECEIVED
FEB 29 1988
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Bureau of Pollution Control

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DIVISION OF SOLID WASTE
REVIEWED BY _____
DATE _____
COMMENTS sent to EPA
3-2-88
DTB

Sincerely,

David L. King

David L. King
Regional Environmental
Coordinator

I called Dave King [illegible] that the filing [illegible] been extended to [illegible]

cc. Rob Anderson
J. D. Clayton
Chuck Vita

REGIONAL OFFICE
P.O. Box 15490
North Little Rock, AR 72231

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

436 Seventh Avenue, Suite 1940, Pittsburgh, PA 15219

RECEIVED
FEB 29 1988
Dept. of Natural Resources
Bureau of Pollution Control

February 26, 1988

Mr. James Hardage
Mississippi Department of Natural
Resources
Bureau of Pollution Control
Box 10385
Jackson, MS 39209

Re: Koppers Company, Inc.
Grenada, MS Facility
Annual Groundwater Report
EPA ID No. MSD 007 027 543

Dear Mr. Hardage:

The Annual RCRA Groundwater Monitoring Summary for 1987 is attached for the Koppers Company, Inc. Grenada, Mississippi facility. As you discussed in a February 2, 1988 phone conversation with Mr. Dave King of Keystone Environmental Resources, Inc., the date for filing the Annual Generator and Facility Reports has been extended to April 1, 1988. This is being done because the appropriate forms have not yet been received by the facility.

If you have any questions or would like additional information, please call me.

Sincerely,

Robert J. Anderson

Robert J. Anderson
Staff Program Manager

DIRECT DIAL #
412-227-2683

RJA/cr
Attachment

cc: J. D. Clayton
J. R. Batchelder
J. A. Quagliotti (w/o attachment)

sent to EPA
3-4-88
RB

Date: 2-22-88

Received call from: Leo Romanowski (EPA - Waste Eng. Div)

Said that EPA Washington had approved Koppers Sampling Plan for developing data to submit petition to delist boiler ash as a hazardous waste on 11-24-87

Dave Porbelson

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171

February 11, 1988

Mr. Robert J. Anderson
Keystone Environmental Resources, Inc.
436 Seventh Avenue, Suite 1970
Pittsburgh, Pennsylvania 15219

Dear Mr. Anderson:

Re: Submittal of a Groundwater Sampling and Analysis Plan
Boiler Ash Disposal Area
Koppers Company, Inc.
Grenada, Mississippi

I have recently reviewed the document entitled "Closure Plan for the Ash Waste Pile as a Landfill Disposal Site" which we received on December 1, 1987. It is indicated in this document that a Groundwater Sampling and Analysis Plan will be submitted prior to closure of the site and that the schedule for closure will be based upon EPA's ruling on Kopper's petition to delist the boiler ash as a hazardous waste. Until such time as EPA rules on Koppers delisting petition, the Bureau must consider the boiler ash disposal area to be in a detection monitoring status. It is therefore required that a Groundwater Sampling and Analysis Plan be submitted within 30 days of the receipt of this letter. This plan should include an accelerated schedule of sampling with one sampling event per month for a four month period. These sampling events should be scheduled to begin immediately after the submittal of the Groundwater Sampling and Analysis Plan. This data is required in order to establish background groundwater quality in the vicinity of the ash disposal area and to perform statistical analysis to determine if there has been an impact on the groundwater from contamination.

If you should have any questions or require any additional information, please contact me at (601) 961-6171.

Sincerely,

David J. Bockelmann

David J. Bockelmann, Hydrologist
Hazardous Waste Division

DB:cm
cc: Mr. J. D. "Rook" Clayton, Plant Manager

DIVISION OF SOLID WASTE
REVIEWED BY _____
DATE _____
COMMENTS Sent to EPA
2-11-88 DJB

FILE COPY

January 25, 1988

Mr. J. D. "Rock" Clayton, Plant Manager
Koppers Company, Inc.
Box 160
Tie Plant, Mississippi 38960

Dear Mr. Clayton:

Re: Report of Findings
Spray Field Characterization
Koppers Company, Inc.
Grenada, Mississippi

I have recently reviewed the above referenced document for Koppers Company, Inc. which we received on April 27, 1987. It is the decision of the Bureau that this document does not satisfy its intended purpose of demonstrating that the spray field at Koppers' Grenada plant is not a RCRA regulated hazardous waste unit. The following is a list of comments pertaining to this decision:

1. Impoundment pump intake. The report states that the pump intake is set approximately 1.5 to 2 feet below the impoundment water level while the sludge layer is at least 5 feet below the water level and that the pump operates at an approximate rate of 120 gallons per minute for 15 minute periods. The fact that the pump intake does not come into direct contact with the sludge layer is not considered to be adequate proof that some of the sludge material will not be drawn into the pump intake and applied to the spray field.

2. Wastewater influent to the spray field. The samples of the wastewater influent to the spray field were apparently collected at one of the evaporation nozzles located along the inside of the impoundment border. It is assumed that the impoundment evaporation nozzles are part of the same system as the nozzles at the spray field; however, this is not stated or documented in the report.

3. Spray field soil samples. The report states that "...soil samples from the surface to a depth of 6 inches were collected...". Bureau representative Jim Hardage was on site when the spray field soil samples were collected and has stated that the top 1 to 2 inch soil/organic layer was

not included in the soil sample collection. If the top 1 to 2 inch soil/organic layer is considered to be separate from the underlying soil layer, then it should be sampled as a separate and discrete layer.

4. Analytical data - Soil, sludge and wastewater analysis (Table 3-2 and Appendix B). Using the data presented in Appendix B, the concentration of Benzo(a)pyrene for the averaged soil sample listed in Table 3-2 should be 238.5 ug/Kg and not 25.0 ug/Kg.

   In the conclusion of the report it is stated that "PAH data indicate that concentrations in the soil are in fact lower than concentrations in the wastewater. Other data indicate that where soil concentrations are greater, the difference is only very slight". An examination of Table 3-2 shows that 3 out of 17 of the polynuclear aromatic hydrocarbons (PAH's) and 7 out of 12 of the phenolic compounds analyzed for had higher concentration levels in the averaged soil sample than in the wastewater sample. This represents slightly over 34% of the constituents analyzed for with higher concentration levels in the averaged soil sample than in the wastewater sample (the majority of these being 1 to 2 orders of magnitude higher). This would seem to indicate that some accumulation is taking place within the spray field soils.

5. Visual observation of the spray field. The report states that "...field observation during sampling indicated the absence of any sludge layer or other visual contamination within the limits of the spray field". On December 15, 1987, Bureau representatives Kim Ehret and I visited the Koppers' Grenada facility. On viewing the spray field, we noted that the vegetation around the spray field nozzles was visibly stained a darker color than the surrounding vegetation in the area. A visual examination of the top soil/organic layer showed it to be a very dark, slightly silty organic soil (the impoundment sludge is described as consisting of "...dark soft silt and clay sediments with some organic debris..."). The stained vegetation and the similarity in the descriptions of the spray field soil and the impoundment sludge would seem to indicate that the possibility for sludge application and/or sludge generation at the spray field does exist.

Please respond to the above comments and provide the following additional information:

1. Samples of the wastewater influent to the impoundment, wastewater in the impoundment and wastewater influent to the spray field should be collected and analyzed for suspended solids. The method and type of filters used for this analysis should be coordinated with Doug Dollar at the Mississippi State University chemical laboratory in order to establish consistency in the testing procedures; his telephone number is (601) 325-7814. In addition, both the suspended solids (if the amount collected is sufficient) and the resultant liquid that passes through the filter should be analyzed for those constituents listed in Table 3-2 of the referenced document.

   The sample of the wastewater influent to the spray field should be collected from one of the spray field nozzles in order to ensure that it will be a representative sample.

2. Several samples of the top 1 to 2 inch soil/organic layer at the spray field should be collected (preferably from the same approximate locations as the previous soil samples) and analyzed for those constituents listed in Table 3-2 of the referenced document.

This sampling event should be scheduled to take place within 30 days of the receipt of this letter. Please notify the Bureau at least 3 days prior to the sampling event so that we can plan to be present to collect split-samples.

If you should have any questions, please call me at (601) 961-5171.

Sincerely,

David J. Bockelmann, Hydrologist
Hazardous Waste Division

DJB:els
cc: Mr. Robert J. Anderson, Keystone Environmental Resources, Inc.
Mr. James H. Scarbrough, EPA
Ms. Jill M. Blundon, Koppers Company, Inc., Legal Services