

General Information

ID	Branch	SIC	County	Basin	Start	End
1696	Chemical	2491	Lowndes	Tombigbee River	10/27/1992	

Address

Physical Address (Primary)	Mailing Address
2300 14th Avenue North	PO Box 268859
Columbus, MS 39701	Oklahoma City, OK 731268859

Telecommunications

Туре	Address or Phone
Work phone number	(405) 775-5129

Alternate / Historic AI Identifiers

Alt ID	Alt Name	Alt Type	Start Date	End Date
2808700020	Tronox LLC, Columbus	Air-AIRS AFS	10/12/2000	06/01/2002
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Construction	06/12/1998	
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Synthetic Minor Operating	06/06/1997	06/01/2002
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Synthetic Minor Operating	06/12/1998	06/01/2002
MSR220010	Kerr McGee Chemical Corporation, Columbus	GP-Wood Treating	10/27/1992	07/13/1997
MSD990866329	Kerr McGee Chemical Corporation, Columbus	Hazardous Waste-EPA ID	10/12/2000	
IIVISI JUULI IXAA 4 7UI	Kerr McGee Chemical Corporation, Columbus	Hazardous Waste-TSD	06/11/2001	04/12/2006
MSD990866329	Tronox LLC, Columbus	Hazardous Waste-TSD	04/13/2006	05/31/2011
1696	Kerr McGee Chemical Corporation	Historic Site Name	10/27/1992	04/10/2006
1696	Tronox, LLC	Official Site Name	04/10/2006	
HVICONUMNIA	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	10/11/1994	10/10/1999
nvicionaria / i	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	08/23/2000	07/31/2005
IMCDIGINATI	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	10/31/2005	04/12/2006
MSP090021	Tronox LLC, Columbus	Water-Pretreatment	04/13/2006	09/30/2010

Regulatory Programs

Program	SubProgram	Start Date	End Date	
Air	NSPS Subpart Dc	09/12/1990	06/01/2002	
Air	SM	06/06/1997	06/01/2002	
Hazardous Waste	Large Quantity Generator	04/01/1997		
Hazardous Waste	TSD - Not Classified	06/11/2001		
Water	PT CIU	10/11/1994	09/01/2003	
Water	PT CIU - Timber Products	10/11/1994	09/01/2003	



	Processing (Subpart 429)		
Water	PT NCS	09/01/2003	
Water	PT SIU	10/11/1994	

Locational Data

Latitude	Longitude	Metadata	S/T/R	Map Links
33 ° 30 '	88 ° 24 '	Point Desc: PG - Plant entrance (General) Data collected by Louis Crawford on 7/11/00. PG - Plant Entrance (General) Data collected by Clift Jeter on 6/13/02. LAT 33deg 30min 36.6sec LON 88deg 24min 35.1sec Method: GPS Code (Psuedo Range) Differential Datum: NAD83 Type: MDEQ	Section:	SWIMS
38 .51	34 .02		Township:	TerraServer
(033.510697)	(088.409450)		Range:	Map It

10/13/2006 10:29:50 AM



General Information

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Columbus, MS 39701	Okianoma City, OK 731208859

Telecommunications

Туре	Address or Phone
Work phone number	(405) 775-5110

Alternate / Historic AI Identifiers

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08700020	Kerr McGee Chemical Corporation, Columbus	Air-AIRS AFS	10/12/2000	
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Construction	06/12/1998	
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Synthetic Minor Operating	06/06/1997	06/01/2002
168000020	Kerr McGee Chemical Corporation, Columbus	Air-Synthetic Minor Operating	06/12/1998	06/01/2002
MSR220010	Kerr McGee Chemical Corporation, Columbus	GP-Wood Treating	10/27/1992	07/13/1997
MSD990866329	Kerr McGee Chemical Corporation, Columbus	Hazardous Waste-EPA ID	10/12/2000	
MSD990866329	Kerr McGee Chemical Corporation, Columbus	Hazardous Waste-TSD	06/11/2001	05/31/2011
1696	Kerr McGee Chemical Corporation	Official Site Name	10/27/1992	
MSP090021	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	10/11/1994	10/10/1999
MSP090021	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	08/23/2000	07/31/2005
MSP090021	Kerr McGee Chemical Corporation, Columbus	Water-Pretreatment	10/31/2005	09/30/2010

Regulatory Programs

Program	SubProgram	Start Date	End Date

Air	NSPS Subpart Dc	09/12/1990	
Air	SM	06/06/1997	
Hazardous Waste	TSD - Not Classified	06/11/2001	
Water	PT CIU	10/11/1994	09/01/2003
Water	PT CIU - Timber Products Processing (Subpart 429)	10/11/1994	09/01/2003
Water	PT NCS	09/01/2003	
Water	PT SIU	10/11/1994	***************************************

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38 .51	34 .2		Township:	TerraServer
(033.510697)	(088.409450)		Range:	Map It

Report Date: 12/15/2005 9:06:32 AM

Compliantile (yellow)



Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No:

Hazardous Waste-TSD

MSD990866329

Physical Address

2300 14th Avenue North Columbus, MS 39701

Lowndes County

Mailing Address

PO Box 25861

Oklahoma City, Oklahoma 73125

Date of Evaluation: 06/14/05

Evaluation Type: Compliance Evaluation Inspection - CEI

Investigator: Larry Hamil

Significant Non-Complier: N

Comments: As manufacturing operations at this location were discontinued in late 2003 followed by dismantlement of the plant, hazardous wastes are no longer generated. Drainage ditch excavation activities along the north and east boundaries of the site were conducted in late 2004. Soil and sediment removed was de-watered on site and manifested for subsequent disposal in accordance with hazardous waste procedures as a precaution, although the material qualified for exemption. The first shipment of separated Penta product, collected from groundwater pumping activities since plant closure and commencement of operations of the new pre-treatment system, is scheduled for the week of June 19, 2005. The 38,000 gallon capacity storage tank is estimated to presently contain about 30,000 gallons. The product will be transported to a wood treating facility in Arkansas for recycling in its manufacturing process.

No RCRA issues were noted during the multi-media inspection. Mr. Roland Hill, the site caretaker, is a very competent and responsible individual.

Signature:

Date: 9-15-0

cc: Data Integration Division

Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities

DCH - Chemical/Physical/Biological	DSI - Surface Impoundments
□DCL - Closure/Post-Closure	DTR - Waste Tanks
□DCP - Contingency Plan	DTT - Thermal Treatment
□DFR - Financial Responsibility	□DWP - Waste Pile
☑DGS - General Standards	CAS - C/A Compliance Schedule
□DGW - Groundwater Monitoring	FEA - Former Enforcement Agreements
DIN - Incineration	☐CSS - Compliance Schedule Violation
DLF - Landfill	☐BRR - Differ Stds for Regulation of Residue
DLB - Land Ban	BPS - BIF Permit Standards
DLT - Land Treatment	BIS - BIF Interim Standards
DMC - Container Management	☐BCE - BIF Stds to Control Emissions
DMR - Manifest	☐BDT - BIF Stds to Direct Transfer
□DOR - Other Requirements	□DIA - Incinerator Waste Analysis
DOT - Other Requirements (Oversight)	DPS - Incinerator Performance Standards
DPB - Part B Permit Application	DOP - Incinerator Operating Requirements
DPP - Preparedness Prevention	DMI - Incinerator Monitoring and Inspection
Generator Facilities	
GER - All Requirements (Oversight)	☐GPT - Pre-Transport
GGR - General Requirements	GRR - Recordkeeping
□GMR - Manifest	GSC - Special Conditions
GLB - Land Ban	☐GSQ - SQG Requirements
GOR - Waste Min. Program	CESQG Requirements
Annual/Biennual HW Report	
Transporters	
Transporters TGR - General Standards	□TWD - HW Discharges
TGR - General Standards	□TWD - HW Discharges □TRR - All Requirements



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Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No:

Hazardous Waste-TSD

MSD990866329

Physical Address 2300 14th Avenue North Columbus, MS 39701

Lowndes County

Mailing Address

PO Box 25861 Oklahoma City, Oklahoma 73125

Date of Evaluation: 5/10/05

Evaluation Type: Operation and Maintenance - OM

Investigator: David Peacock

Significant Non-Complier: N

Comments: An Operation & Maintenance (O&M) Inspection and a Compliance Evaluation Inspection (CEI) were conducted on 05/10/05 at Kerr-McGee Chemical Corporation's Columbus, Mississippi facility. These inspections were to determine Kerr-McGee's compliance to conditions set forth in its RCRA permit, applicable Mississippi Hazardous Waste Regulations, and current EPA approved protocols for monitor well sampling.

Boundary of the facility is fenced and locked with the closed RCRA impoundment having an additional fence. All observed monitor wells were locked, labeled, and in good condition. The groundwater recovery system was operating efficiently (pumping at a rate of 31 gpm when observed). All recovered groundwater is run through an oil/water separator and the recovered creosote is stored on site in a 17,000 gallon tank. Recovered product will be sold when tank is full. After recovered water leaves oil/water separator it is discharged to City of Columbus POTW. No hazardous waste is generated at the facility. All recordkeeping as required by facility's permit was complete and up-to-date.

Static water levels were determined (to the nearest .01 foot) in each well using an electronic water level indicator. Each well is purged (3 well volumes) using a disposable PVC bailer and nylon string. Parameters are monitored during bailing (Hanna Instruments). All purge water was collected in 55 gallon drums and disposed of into facility's oil/water separator. Once purging was completed, samples were collected using a dedicated stainless steel bailer. Samples were collected into laboratory-supplied glassware (Lancaster Labs, Lancaster, PA), placed on ice, and proper chain-of-custody paperwork was completed.

Signature:	ů,
Date:	

Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities

□DCH - Chemical/Physical/Biological	□DSI - Surface Impoundments
☑DCL - Closure/Post-Closure	DTR - Waste Tanks
DCP - Contingency Plan	DTT - Thermal Treatment
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DIN - Incineration	CSS - Compliance Schedule Violation
DLF - Landfill	☐BRR - Differ Stds for Regulation of Residue
DLB - Land Ban	☐BPS - BIF Permit Standards
DLT - Land Treatment	☐BIS - BIF Interim Standards
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Generator Facilities	
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GLB - Land Ban	☐GSQ - SQG Requirements
GOR - Waste Min. Program	CESQG Requirements
Annual/Biennual HW Report	
Transporters	
☐TGR - General Standards	☐TWD - HW Discharges
☐TMR - Manifest	TRR - All Requirements
TOR - Other Requirements	



Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No:

Hazardous Waste-TSD

MSD990866329

Physical Address

2300 14th Avenue North Columbus, MS 39701 Lowndes County **Mailing Address**

PO Box 25861 Oklahoma City, Oklahoma 73125

Date of Evaluation: 5/10/05

Evaluation Type: Operation and Maintenance - OM

Investigator: David Peacock

Significant Non-Complier: N

Comments: An Operation & Maintenance (O&M) Inspection and a Compliance Evaluation Inspection (CEI) were conducted on 05/10/05 at Kerr-McGee Chemical Corporation's Columbus, Mississippi facility. These inspections were to determine Kerr-McGee's compliance to conditions set forth in its RCRA permit, applicable Mississippi Hazardous Waste Regulations, and current EPA approved protocols for monitor well sampling.

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Signature:

Date: 06/22/05



Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No: MSD990866329

Physical Address 2300 14th Avenue North Columbus, MS 39701 Lowndes County Mailing Address
PO Box 25861
Oklahoma City, Oklahoma 73125

Date of Evaluation: 05/10/2005

Evaluation Type: Compliance Evaluation Inspection - CEI

Investigator: David Peacock

Significant Non-Complier: N

Comments: See Operation & Maintenance Inspection report

Signature:

1 /

cc: Data Integration Division

Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities

DCH - Chemical/Physical/Biological	∐DSI - Surface Impoundments
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	77 4
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TOR - Other Requirements	



Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No: Hazardous Waste-TSD MSD990866329

Physical Address

2300 14th Avenue North Columbus, MS 39701 Lowndes County **Mailing Address**

2300 14th Avenue North Columbus, Mississippi 39701

Date of Evaluation: 5/11/04 9:00:00 AM

Evaluation Type: Compliance Monitoring Evaluation - CME

Investigator: Wayne Stover

Significant Non-Complier: N

Comments: As a result of the inspection, it was determined there were no apparent violations of the Hazardous Waste Permit or the Mississippi Hazardous Waste Management Regulations.

Signature

Date: 0(25/04

cc: Data Integration Division

Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities

DCH - Chemical/Physical/Biological	DSI - Surface Impoundments
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Annual/Biennual HW Report	2
Transporters	
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☐TOR - Other Requirements	



Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name: Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No: Hazardous Waste-TSD MSD990866329

Physical Address

2300 14th Avenue North Columbus, MS 39701 Lowndes County **Mailing Address**

2300 14th Avenue North Columbus, Mississippi 39701

Date of Evaluation: 5/11/04 9:00:00 AM

Evaluation Type: Compliance Evaluation Inspection - CEI

Investigator: Wayne Stover

Significant Non-Complier: N

Comments: There were no apparent violations.

Signature:

cc: Data Integration Division

Mississippi Department of Environmental Quality Office of Pollution Control

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Mississippi Department of Environmental Quality Office of Pollution Control Hazardous Waste Compliance Inspection Report

Site Name:

Kerr McGee Chemical Corporation, Columbus

EPA ID: MSD990866329

Permit No: N/A

Hazardous Waste-TSD

MSD990866329

Physical Address

2300 14th Avenue North Columbus, MS 39701 Lowndes County **Mailing Address** 2300 14h Avenue North

Columbus, MS 39701

Date of Inspection: 08/22/02

Investigator: Larry Hamil

Significant Non-Complier: N

Comments: As the plant manager and assistant plant manager were both attending corporate meeting in Oklahoma City on the day of the inspection, I was escorted and assisted by Mr. Charles Johnson, Shipping Supervisor. Mr. Johnson was thoroughly knowledgeable of the facility's practices and operations toward maintaining compliance with applicable environmental regulations and provided. Twelve filled and appropriately labeled drums were in the 90-day storage area for future transport. One drum was dented and was to be overpacked prior to shipment. No cracks or punctures were associated with the indentation. There was also a labeled and dated 20-yard roll-off container with F034 wastes (excavated soil from replacement of an underground wastewater line adjacent to the closed impoundment) awaiting off-site transport. Due to the nature of the container, it had not been transferred to the 90-day storage area, but remained in the satellite accumulation area, but not subject to any disturbance by plant operations. Review of the facility's Contingency Plan did not expose any deficiencies. Weekly inspections of container storage were well documented. Regulations applicable to drip pad operations were also reviewed.

Signature:

Date: 12/11/02

cc: Data Integration Division

C. Larry Hamil

Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities

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Transporters	
· -	
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☐TOR - Other Requirements	



RERA Compliance File (Yellow

Name Robert E. Pounds Title Project Manager

Phone (405) 775-5601 Fax (405) 775-6562 e-mail robert.pounds@tronox.com

March 13, 2009

Mr. Toby Cook
Mississippi Department of Environmental Quality
Office of Pollution Control - Permits
P.O. Box 2261
Jackson, MS 39225
(601) 961-5067

RECEIVED

MAR 1 8 2009

Dept of Environmental Quality
Office of Pollution Control

Re:

Tronox LLC, Columbus - Lowndes County

HWM Permit MSD 990 866 329

Temporary Interruption of Groundwater Corrective Action

Dear Mr. Cook,

This serves as a follow up to notification provided by e-mail on March 9, 2009 that Tronox LLC (Tronox) was informed by the City of Columbus on the morning of March 9th that the local POTW would be unable to accept waste water discharges from our facility during imminent periods of inspection and maintenance of the City's sewer line. The service outages were scheduled to occur Monday, March 9, 2009, from 12:00 pm until 6:00 pm, and from 7:00 am to 6:00 pm Tuesday, March 10, 2009, Wednesday, March 11, 2009, and possibly Thursday, March 12, 2009. Consequently, Tronox suspended waste water treatment and discharge before 12:00 pm March 9th.

On Wednesday, March 11, 2009 Tronox was notified by the contractor performing the inspection and maintenance that the remainder of the work was going to be postponed and that Tronox could resume waste water discharge. As a result Tronox resumed groundwater corrective action activities on the same day.

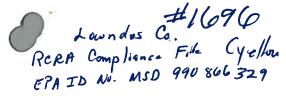
If Tronox will be required to suspend waste water discharges when the inspection and maintenance work resumes we will again provide notice.

If you have any questions or need any further information please contact Robert Pounds at (405) 775-5601 or by e-mail at robert.pounds@tronox.com.

Sincerely,

Robert E. Pounds Robert E. Pounds cc: Russ Mclean – USEPA Deismon Ross - MDEQ File





Robert E. Pounds Project Manager 405-775-5168 robert.pounds@tronox.com

September 25, 2008

Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204

Re: Tronox LLC
Columbus Mississippi Closed Facility
2008 Semi-Annual Corrective Action Performance
Evaluation Report and Groundwater Monitoring Report
HW-90-329-01

Dear Mr. Cook:

Enclosed, please find two copies of the 2008 Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by October 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 775-5168.

Sincerely,

Robit E. Ponds

ROBERT E. POUNDS Project Manager

RP/twr Enclosures



RCRA Compliance file (yellow)
67A * MSD 990 866 329

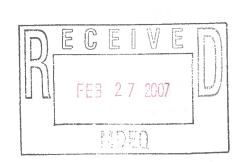
Robert E. Pounds Project Manager

405-775-5168 robert.pounds@tronox.com

February 27, 2007

Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204

Re: Tronox LLC
Columbus Mississippi Closed Facility
2005 Annual / Semi-Annual Corrective Action Performance
Evaluation Report and Groundwater Monitoring Report
HW-90-329-01



Dear Mr. Cook:

Enclosed, please find two copies of the 2006 Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 775-5168.

Sincerely,

TRONOX LLC

ROBERT E. POUNDS Project Manager

Robert E. Pounds

RP/twr Enclosures



RCRA Compliance File (yellow)

Lowades Co. # 1690

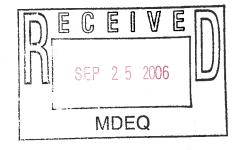
MSD 990 866329

Steven A. Ladner Staff Environmental Specialist

405-775-5129 steve.ladner@tronox.com

September 22, 2006

Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204



Re: Tronox LLC
Columbus Mississippi Closed Facility
2006 Semi-Annual Corrective Action Performance
Evaluation Report and Groundwater Monitoring Report
HW-90-329-01

Dear Mr. Cook:

Enclosed, please find two copies of the 2006 Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires a semi-annual report on the groundwater monitoring program evaluating the performance of the corrective action to be submitted by October 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 775-5129.

Sincerely,

TRONOX LLC

STEPHEN A. LADNER

Staff Environmental Specialist

SL/twr Enclosures





Steven A. Ladner Project Manager

405-775-5129 steve.ladner@tronox.com

February 24, 2006

Lownder Co.

ReRA Compliance File (Yellow

Kerr M Gre Columber

EPA ID # MSA 990 866 329

Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204

Re: Tronox LLC Columbus Mississippi Closed Facility 2005 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Cook:

Enclosed, please find two copies of the 2005 Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 775-5129.

Sincerely,

TRONOX LLC

STEPHEN A. LADNER

Project Manager

SL/twr Enclosures





HALEY BARBOUR GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

October 6, 2005

Mr. Stephen A. Ladner Environmental Specialist Kerr McGee Chemical Corporation, Columbus PO Box 25861 Oklahoma city, Oklahoma 73125

Dear Mr. Ladner:

Re: Kerr McGee Chemical Corporation,

Columbus

2005 Groundwater Report

Hazardous Waste Ref. No.MSD990866329

Lowndes County

Based on our review of the referenced report, we are requesting that future reports detail the quantity of free product recovered over time, so that trends in this indicator can be tracked.

If you have any questions, please contact me at (601) 961-5067.

Sincerely,

Toby M. Cook, P.E., Chief

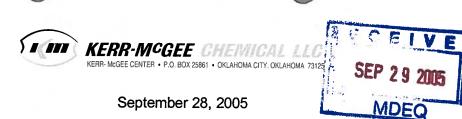
Chemical Manufacturing Branch

Toly m Cork

Environmental Permits Division

cc: Russ Mclean, USEPA

#1696



Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC Columbus Mississippi Facility 2005 Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Cook:

Enclosed, please find two copies of the *2005 Semi-Annual Corrective Action Performance Evaluation* and *Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1 of the Permit. The Permit requires a semi-annual report evaluating the performance of the corrective action to be submitted by October 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC

Staff Environmental Specialist

SL/TWR

Enclosures





HALEY BARBOUR
GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

September 15, 2005

Mr. Steve Ladner
Staff Environmental Specialist
Kerr McGee Chemical Corporation
PO Box 25861
Oklahoma City, Oklahoma 73125

Dear Mr. Ladner:

Re:

Inspection Report

Kerr McGee Chemical Corporation, Columbus

Columbus, Lowndes County

Hazardous Waste-EPA ID

MSD990866329

Enclosed is a copy of the compliance evaluation inspection report completed as a result of this office's inspection at Kerr McGee Chemical Corporation, Columbus on June 14, 2005. The report should be used by you as a guide for complying with requirements and conditions as stated in the applicable regulations.

If you have any questions concerning this matter, please contact me at (601) 961-5123.

Sincerely,

Larry Hamil
Timber & Wood Products Branch
Environmental Compliance & Enforcement Division

Agency Interest No. 1696 INS20050003



FILE COPY

HALEY BARBOUR
GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

June 22, 2005

Mr. Steve Ladner Kerr McGee Chemical Corporation, Columbus PO Box 25861 Oklahoma City, Oklahoma 73125

Dear Mr. Ladner:

Re:

Inspection Report

Kerr McGee Chemical Corporation, Columbus

Columbus, Lowndes County

Hazardous Waste-TSD MSD990866329 Hazardous Waste-EPA ID MSD990866329

Enclosed is a copy of the Operation & Maintenance Inspection and Compliance Evaluation Inspection reports completed as a result of this office's inspection at Kerr McGee Chemical Corporation, Columbus, Mississippi facility on 5/10/05. The reports should be used by you as a guide for complying with requirements and limitations stated in your permit.

At the time of the inspection, this facility was found to be in compliance with all pertinent Mississippi Hazardous Waste Management regulations, its RCRA hazardous waste permit, and was adhering to established protocols for sampling ground water monitor wells within the RCRA program.

If you have any questions concerning this matter, please contact me at (601) 961-5220.

Sincerely,

David Peacock

Technical Support Branch

Environmental Compliance and Enforcement Division

hura K. Percol

Agency Interest No. 1696 INS20050001





HALEY BARBOUR
GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

June 22, 2005

Mr. Steve Ladner Kerr McGee Chemical Corporation, Columbus PO Box 25861 Oklahoma City, Oklahoma 73125

Dear Mr. Ladner:

Re:

Inspection Report

Kerr McGee Chemical Corporation, Columbus

Columbus, Lowndes County

Hazardous Waste-TSD MSD990866329 Hazardous Waste-EPA ID MSD990866329

Enclosed is a copy of the Operation & Maintenance Inspection and Compliance Evaluation Inspection reports completed as a result of this office's inspection at Kerr McGee Chemical Corporation, Columbus, Mississippi facility on 5/10/05. The reports should be used by you as a guide for complying with requirements and limitations stated in your permit.

At the time of the inspection, this facility was found to be in compliance with all pertinent Mississippi Hazardous Waste Management regulations, its RCRA hazardous waste permit, and was adhering to established protocols for sampling ground water monitor wells within the RCRA program.

If you have any questions concerning this matter, please contact me at (601) 961-5220.

Sincerely,

David Peacock

Technical Support Branch

Environmental Compliance and Enforcement Division

and K Peacob)

Agency Interest No. 1696 INS20050001



February 18, 2005

Mr. Toby M. Cook, P.E. Environmental Permits Division Office of Pollution Control Mississippi Department of Environmental Quality 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Closed Facility 2004 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Cook:

Enclosed, please find two copies of the 2004 Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/twr Enclosures



"Ladner, Steve" <SLadner@kmg.com> 11/16/2004 06:25 AM

To: <Mclean.Russ@epamail.epa.gov>, <Larry_Hamil@deq.state.ms.us> cc: "Christiansen, John Michael" <JChristiansen@kmg.com>, "Cubbage, T L" <TCubbage@kmg.com>

Subject: FW: Columbus Project Update - November 11, 2004

Russ and Larry,

Just an update on Columbus, all work completed and no media issues or community issues during field work. Report will follow, call if you need anything,

Steve

----Original Message----

From: Chuck.Harrell@erm.com [mailto:Chuck.Harrell@erm.com]

Sent: Thursday, November 11, 2004 7:44 PM

To: Ladner, Steve

Cc: Barrett.Cieutat@erm.com; Bock, Nick; Robert.Coffman@erm.com;

Raj. Vadlamudi@erm.com; Hamilton, John

Subject: Columbus Project Update - November 11, 2004

Steve,

Field work has been completed. Work completed today included:

Remaining truck mats were deconned and picked up from the site Regraded Area 4 between ditch and BNSF tracks
Removed C&G crossing (2 tracks)
Removed KMC crossing (4 tracks)
Excess fill material used to fill low area on KMC property
Regraded temporary access road from 14th Avenue to Area 3 to address ponded water
Removed temporary culvert in Area 3
General site cleanup and demobilization

Construction equipment will be picked up tomorrow. Remediation work has been completed with 0 health and safety incidents. Congratulations and thanks to all involved for a job well done.

If you have any questions or require any additional information, don't hesitate to give me a call.

Thanks,

Chuck

NOWNDES CO. ACRA, Compliance File, MSD 990 866 329, CLH

October 21, 2004

Mr. Joel H. Hudnall, P.E. Vice President - North Mississippi Region Neel-Schaffer, Inc. 2310 Martin Luther King, Jr. Drive Columbus, Mississippi 39701



Subject:

Implementation of Interim Measures

Kerr-McGee Columbus Facility

2300 14th Avenue North

Columbus, Lowndes County, Mississippi

Dear Mr. Hudnall:

On behalf of Kerr-McGee Chemical LLC (KMC), this correspondence is intended to document verbal communications in which the City of Columbus has expressed no objections to performance of planned interim measures in ditches bordering the above-referenced KMC property. Activities will be conducted in general accordance with the Interim Measures Work Plan (dated August 8, 2001), which was forwarded to your attention on August 30, 2004. Specifically, affected sediments will be excavated from the main drainage ditch located along the south side of 14th Avenue North between 22nd Street and Martin Luther King, Jr. Drive, and on the eastern and western banks of the BNSF and C&G railroad lines located south of 14th Avenue North. To the extent that these activities will warrant temporary access and use of City of Columbus property and/or right-of-ways, this correspondence memorializes your prior approval.

In addition, since performance of this work will involve management of storm water, we have completed a Small Construction Notice of Intent (SCNOI) and developed a Storm Water Pollution Prevention Plan (SWPPP) as required for coverage under Mississippi's Small Construction General Permit. Copies of these documents were e-mailed to your office on September 24, 2004.

We appreciate your time and consideration with this matter and look forward to your continued support through completion of the project. If you need any additional information or any further clarification of our work scope, please feel free to give me a call at (504) 831-6700.

Sincerely,

Environmental Resources Management

Barrett A. Cieutat, P.G.

Senior Associate

BAC/pcv

cc:

Steve Ladner (Kerr McGee)

Nick Bock (Kerr McGee)

Russ McClean (EPA - Region IV)

Larry Hammil (MDEQ)

Environmental Resources Management

3838 N. Causeway Blvd. Suite 2725 Metairie, Louisiana 70002 (504) 831-6700 (504) 831-6742 (fax)







Haley Barbour

Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

September 15, 2004

Mr. Steve Ladner
Project Manager
Kerr-McGee Chemical, LLC
P.O. Box 25861
Oklahoma City, OK 73125

Dear Mr. Ladner:

Re: Waste Classification

Off-site Surface Drainage Excavation

Columbus, MS Site

EPA ID # MSD 990 866 329

In response to your letter received in our office August 3, 2004, we concur with the company's determination of the classification for the soil that will be excavated from the drainage conveyances off-site and leading from the referenced site. Management of this material shall be in accordance with the measures described in the aforementioned correspondence. However, should any free product or creosote saturated soils be discovered during performance of this approved corrective action, MDEQ would require any material of this description be recycled as commercial product, or otherwise classified and managed as hazardous waste.

Based upon the joint site visit with EPA on September 14, 2004 to review and discuss the plan, the project appears to be well organized and thoroughly prepared for the September 27, 2004 commencement. A site visit is presently planned during the first week of October to observe activities in progress at that time.

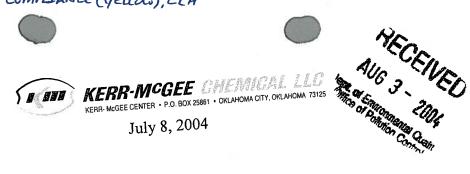
Please contact me at 601-961-5123, as circumstance warrant.

Larry Hamil

Environmental Compliance & Enforcement Division

cc: Mr. Russ McClean, EPA-Region IV

Mr. Toby Cook, MDEQ Mr. Jerry Banks, MDEQ



Mr. Larry Hammil Mississippi DEQ Office of Pollution Control PO Box 10385 Jackson, Mississippi 39289 Mr. Russ McLean Project Manager US EPA Region IV Atlanta Federal Center 61 Forsyth Street Atlanta, Georgia 30303-8960

Re: Waste Classification Kerr-McGee Chemical LLC Columbus, Mississippi EPA ID Number MSD 990 866 329

Dear Mr. Hammil and Mr. McLean:

As per our conversation this morning, Kerr-McGee Chemical LLC (KMC LLC) will be performing voluntary corrective measures in an area of surface drainage located off-site of the plant. These measures were presented to and approved by Russ McLean, USEPA Region IV. It is KMC LLC's intention to perform this work in September, 2004. As we discussed, a site meeting or teleconference will be accomplished prior to any startup of work related to this task.

The purpose of this correspondence is to determine the waste classification for any excavated material from these surface water drainage ditches. I have enclosed correspondence from KMC LLC to Jerry Banks in 2002 pertaining to a similar site in Hattiesburg, Mississippi outlining discussions of waste classifications for this type of The correspondence outlines the following points: material.

- The agency has advanced the decision that impacted materials from off-site locations are not appropriately classified as listed hazardous wastes.
- Even with this interpretation, KMC LLC would not be sending this to any other facility than a secured, hazardous waste facility.
- KMC LLC proposal was to handle any materials from excavation "as if" they were hazardous, including using a hazardous waste hauler, manifest system, and disposal at a RCRA landfill, but the waste itself would not be classified as hazardous.

Mr Larry Hammil and Mr.Russ McLean July 8, 2004 Page 2

 EPA supports this decision to extend the interpretation to these conditions through the following documentation:

"It has been the Agency's longstanding policy that in cases where the origin of the contaminants is unknown, the lead agency may assume that contaminants in media did not originate from listed hazardous waste" (61 FR 18792, April 29, 1996).

I have enclosed the MissDEQ response dated September 19, 2004 to this interpretation and approval of the interpretation with the exception of the discovery of free product or creosote saturated soils.

Based on these correspondences, KMC LLC is proposing the same waste classification be applied to the voluntary corrective measures at Columbus, Mississippi. KMC LLC will perform the same methodology of handling excavated materials "as if" they were hazardous, including the use of a hazardous waste hauler, manifest system and disposal in a RCRA landfill, but not classifying the waste as hazardous.

Please review this proposal and feel free to contact me, Steve Ladner at (405) 270-2625, if you have any further questions.

Thank you for your time and consideration in this matter.

Sincerely,

On behalf of KERR-McGEE CHEMICAL LLC FOREST PRODUCTS DIVISION

Stephen A. Ladner
Project Manager

cc: N. E. Bock, KM Shared Services
Barrett Cieutat, ERM
Dickie Allison, KM Shared Services
T. L. Cubbage, KM Shared Services



August 29, 2002

Jerry Banks, PE Chief, Hazardous Waste Division Mississippi Department of Environmental Quality PO Box 10385 Jackson, MS 39289-0385

RE: Waste Classification

Former Gulf States Creosoting Site Hattiesburg, Mississippi

Dear Mr. Banks:

On Monday, August 19, 2002, Nick Bock and I discussed with you the issue of waste classification at the above-referenced site (Site). First we discussed the Agency's previous decision that impacted materials from offsite locations are not appropriately classified as listed hazardous waste. In spite of this, Mr. Bock expressed our concern in sending heavily contaminated materials to other than a secured, hazardous waste facility. We explained our proposal to handle these materials "as if" they were hazardous, to include using a hazardous waste hauler, manifest system and disposal at a RCRA landfill, but that the waste itself would not be classified as hazardous.

Mr. Bock proposed, for the following reasons, that the state should correctly extend this decision to impacted waste materials removed from the former facility Site. EPA supports this proposal, "It has been the Agency's longstanding policy that in cases where the origin of the contaminants is unknown, the lead agency may assume that contaminants in media did not originate from listed hazardous waste." (61 FR 18792, April 29, 1996). This is certainly the case for subsurface wastes at the Site, including those in the concrete sump and the wooden substructure. There is no way in to determine the origin of these materials. We committed to handle these materials in the same way that we propose to handle impacted offsite materials. Given our commitment on material handling, you indicated you could approve our proposal, and asked that we submit it in writing for your approval.

Mr. Jerry Banks, P.E. August 29, 2002 Page 2

We appreciate your time and look forward to the Agency's approval of the previously-submitted final RAP. If you have any questions or comments, please call me at 405/270-3747 or Mr. Bock at 405/270-2394.

Sincerely,

A. Keith Watson Project Manager

cc.

Nick Bock William Green

Glen Pilie' - Adams & Reese

David Upthegrove - Michael Pisani & Associates

Complance File (Yellow label)



STATE OF MISSISSIPPI

HALEY BARBOUR GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

July 7, 2004

Mr. Stephen O. Ladner Kerr McGee Chemical LLC PO Box 25861 Oklahoma City, Oklahoma 73125

Dear Mr. Ladner:

Re: Kerr McGee Chemical Corporation, Columbus Lowndes County
Haz. Waste Ref. No. MSD990866329

We have reviewed the groundwater investigation work plan dated June 25, and request clarification on the following points:

- 1. Explain how the groundwater samples will be obtained with the geoprobe- methodology, screen to be used, purging, etc.
- 2. Will some type of field screening equipment be used, and if so, explain.
- 3. If any of the initial locations prove to be "hot", what will the lateral spacing be for the next boring?

If you have any questions, please contact me at (601)961-5067.

Toly m Cork

Toby M. Cook, P.E.

Environmental Permits Division

cc: Russ McLean



Ross Williams 07/01/2004 02:00 PM

To: Toby Cook/EPD/OPC/DEQ@DEQ

CC

Subject: Kerr-McGee/ Columbus

Toby,

This appears to resemble a typical groundwater field delineation program. However, if I would was asking them questions I would ask them to provide a more detailed explanation for the following items discussed in the letter.

1. Further discussion on how groundwater samples are to be obtained. i.e. sampling methodology, type of screen used, purging of temporary wells etc.

2. Further discussion on what is meant by field determination (will they utilize some type of field screening

equipment) if so, what?

3. If any of the proposed locations north of CMW31 are determined by field methodology to be "hot" Will they investigate further north, and if so at what lateral spacing.

Ross D. Williams, RPG MDEQ/OPC/EPD/Mining and Solid Waste Branch PO Box 10385 Jackson, MS 39289-0385

Tele: 601-961-5526 Fax: 601-354-6612



June 25, 2004

ENVIRONMENTAL

Mr. Toby M. Cook, P.E. **Environmental Permits Division** Office of Pollution Control Mississippi Department of Environmental Quality

P.O. Box 10385

Jackson, Mississippi 39289 - 0385

Re: Kerr-McGee Chemical LLC -Forest Products Division

Columbus Mississippi Facility

Proposed Additional Groundwater Assessment: CMW31 - CMW36 Area

Dear Mr. Cook:

In response to your March 26, 2004 correspondence requesting additional groundwater assessment at the Columbus facility, Kerr-McGee Chemical LLC - Forest Products Division (KMCLLC-FPD) proposes an additional groundwater investigation program to address plume boundary questions and potential remedial measures in the vicinity of monitor well CMW31 and CMW36.

KMCLLC-FPD proposes to utilize a Geoprobe system to characterize the groundwater quality at the approximate locations shown on the accompanying figure. The number of Geoprobe locations may be increased or decreased based on field determinations and the extent of characterization. Each location will involve both a lithologic test with tool penetration to the Eutah formation (approximately 13 to 17 feet below grade) and a second test to collect a representative groundwater sample for laboratory analysis. The groundwater samples will be collected, prepared, and shipped in accordance with the facility Sampling and Analysis Plan, and analyzed for the acid and base/neutral fraction of K001 constituents (method 8270) listed in the facility Post-Closure Permit. The Geoprobe investigation will continue until field evidence indicates that the plume associated with well CMW31 has been sufficiently delineated.

Following completion of the Geoprobe program and receipt of the groundwater laboratory analytical results, a groundwater monitor well(s) will be installed. The well(s) will be constructed with 2-inch diameter Stainless Steel casing and screen, and will be set at depths suitable to monitor groundwater in the alluvial water table aquifer. All well installation, development, and completion activities will be conducted in accordance with the procedures presented in Attachment E of the approved facility Post-Closure Permit. An additional groundwater sampling episode will be conducted following installation of any additional monitor wells. The additional wells plus those wells in the immediate vicinity of well CMW31 (see attached figure) will be sampled for analysis of the specific K001 acid/base/neutral extractables (method 8270) listed in the Post-Closure Permit.



Mr. Toby Cook, P.E. June 25, 2004 Page 2

The results of the groundwater investigation and sampling program will be utilized to determine appropriate additional remedial measures, if warranted, for the impact associated with well CMW31. At the present time, well CMW31 has been included on the list of wells that are pumped on a weekly basis for creosote removal. The product recovery records for CMW31 will be added to well recovery data tables included in the semi-annual reports. In addition, the results of the groundwater assessment program will be included in the next semi-annual report to be submitted on October 1.

If you have any questions concerning this proposed groundwater investigation program, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL CORP. FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/twr

Attachment cc: Mr. I

Mr. Russ McClean, USEPA - Region IV

T. Reed







STATE OF MISSISSIPPI

HALEY BARBOUR GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

June 23, 2004

Mr. Stephen A. Ladner Kerr McGee Chemical P.O. Box 25861 Oklahoma City. OK 73128

Dear Mr. Ladner:

Re: Haz

Hazardous Waste Inspection Report

Kerr McGee Chemical Corporation,

Columbus

Hazardous Waste-TSD MSD990866329

Lowndes County, Columbus, MS

Enclosed is a copy of the CME and CEI inspection reports completed as a result of this office's inspection at Kerr McGee Chemical Corporation, Columbus on 5/11/04 9:00:00 AM. The reports should be used by you as a guide for complying with requirements and limitations stated in your permit.

As a result of the inspection, it was determined there were no apparent violations of the Hazardous Waste Permit or the Mississippi Hazardous Waste Management Regulations.

If you have any questions concerning this matter, please contact me at 601-961-5308.

C. Way Stre

C. Wayne Stover, Jr, P.G.

Service and Misc. Brach

Environmental Compliance and Enforcement

Division

Agency Interest No. 1696 INS20040001



STATE OF MISSISSIPPI GOVERNOR HALEY BARBOUR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

March 26, 2004

Mr. Stephen O. Ladner Kerr McGee Chemical LLC PO Box 25861 Oklahoma City, Oklahoma 73125

Dear Mr.Ladner:

Re: Kerr McGee Chemical Corporation, Columbus Lowndes County
Haz. Waste Ref. No. MSD990866329

Groundwater File (blue label)

We have reviewed the 2003 Corrective Action and Groundwater Monitoring Report received February 27, 2004. Based on the information contained in the report, Kerr McGee should submit a revised Corrective Action Plan to address the contamination in the area of CMW31. This plan should also address determining the extent of the groundwater contamination plume, since the plume remains undefined as to its extent north of monitoring well CMW36.

Please submit the requested plan, including a schedule of implementation, by July 1, 2004. If you have any questions, please contact me at 601-961-5067.

Sincerely,
Toly m God

Toby M. Cook, P.E

Environmental Permits Division.

cc: Larry Hammil Russ McLean



February 26, 2004

Mr. Larry Hammil Environmental Permitting Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Closed Facility 2003 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01



Dear Mr. Hammil:

Enclosed, please find two copies of the 2003 *Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/twr Enclosures

cc: T. Reed





Ross Williams 03/24/2004 04:03 PM

To: Toby Cook/EPD/OPC/DEQ@DEQ

Subject: Al 1696, GW Monitoring Review

Itaz. Waste I.O. # MSD990866 Groundwater blue label Lowndes Co.

Toby,

Please be advised of the following for the 2003/Annual-Semiannual report for Kerr McGee -Columbus.

An area of freephase (DNAPL) as well as dissolved creosote constituents is apparent in the northeastern quadrant of the site as documented by the report. The 4/28 and 11/04-03 sampling events indicate freephase DNAPL associated with monitor well CMW31. Dissolved DNAPL constituents are associated with groundwater at monitor wells CMW27 in the 4/28/03 event and CMW36 in the 11/04/04 event. CMW36 is located within 15 feet of the northern property line according to Figure 4 of the report. There are no additional control wells north of CMW36 to determine the extent of the plume. Any additional wells would require an offsite investigation in an area which may be in a residence. The present apparent size of this isolated DNAPL plume may exceed 75,000 ft.squared. There is no documentation in the report which indicates the thickness of the DNAPL associated with CMW31.

The groundwater being monitored is located in alluvium associated with Luxapallila Creek which is located east of the plant facility approximately 2300 feet. The aquifer is an apparent water table aquifer with flow towards the creek. The alluvium is located unconformably on top of the Eutaw Formation. The contact between the alluvium and the underlying Eutaw formation represents an erosional surface. Typically the top of a water table aquifer will reflect 2 things, the surface topography and any underlying structure at the base of the aquifer. In this case, groundwater elevations in the vicinity of the DNAPL plume indicate the presence of a structural depression that may be associated with an erosional surface at the interface between the creek alluvium and the Eutaw Formation as depicted in Figures 5 and 6 of the report.

Also worthy of mentioning is a comparison between the potentiometric surface maps of the alluvium (water table aquifer) Figures 5 and 6 and the potentiometric surface maps of the 1st monitored aquifer in the underlying Eutaw Formation (Figures 7 and 8). The potentiometric surfaces of both aquifers are remarkably similar which suggests that hydraulic communication may exist between the water table aquifer and the lower aquifer. One well in the Eutaw Formation, CME7, located on the east part of the site and within a defined plume area with free phase, exhibited a "hit" of fluoranthene, 2 ug/l although at present this hit is not quantifiable with the laboratory, we probably need to keep our eye on the lower wells since DNAPL are associated with the site.

Any other concerns please contact me.

Ross D. Williams, RPG MDEQ/OPC/EPD/Mining and Solid Waste Branch PO Box 10385 Jackson, MS 39289-0385

Tele: 601-961-5526 Fax: 601-354-6612 LOWNDES CO., HAZWHSTES, COMPLIANCE (YELLOW WIT), LLH



January 13, 2004

1441 5 6 5637

Mr. Larry Hammill Mississippi DEQ Office of Pollution Control PO Box 10385 Jackson, Mississippi 39289

Re: Former Wood Treating Site Kerr-McGee Chemical LLC Columbus, Mississippi

Dear Mr. Hammill:

Thank you for your site visit on December 17, 2003. This correspondence serves as documentation of our discussions and for site closure of the wood treating plant located in Columbus, Mississippi owned by Kerr-McGee Chemical LLC.

As per our discussions, KMC LLC submitted a site closure strategy document on June 13, 2003 identifying the scope and procedures to close the former wood treating plant. AS a follow-up, we scheduled a site visit on December, 17 to review the work performed at the site, and the new wastewater treatment plant. As we discussed during our meeting, a separate correspondence will be sent with the Annual Stormwater Monitoring Report to discuss the status of the stormwater permit at the end of the month.

This letter will review the aforementioned topics and our disscusions:

Plant Closure

The demolition and closure of the site went according to the closure strategy prescribed in the workplan submitted in June. As was noted all existing structures with the exception of the maintenance building and office building were demolished. All areas involved in the process where demolished to grade leaving the concrete foundations at grade. Areas involved in the process, such as the Tank Farm, Retort building, and Drip Pad were sealed with asphalt over the concrete foundations for capping purposes.

As prescribed in the closure strategy workplan, the drip pad was closed as a Landfill.

A review of the site during your visit did not delineate areas of concern or areas that would need further investigation.

Mr. Larry Hammill January 13, 2004 Page 2

Wastewater Treatment Plant

As part of the tour and discussion, MissDEQ inspected the new wastewater treatment system that was re-piped and constructed in the former maintenance building. The new system utilizes the same methods to treat the groundwater as the former system. Enclosed please find a schematic of the new system (Attachment I).

Thank you for your time and consideration in this matter. Please feel free to contact me, Steve Ladner at (405) 270-2625.

Sincerely,

KERR-McGEE CHEMICAL LLC FOREST PRODUCTS DIVISION

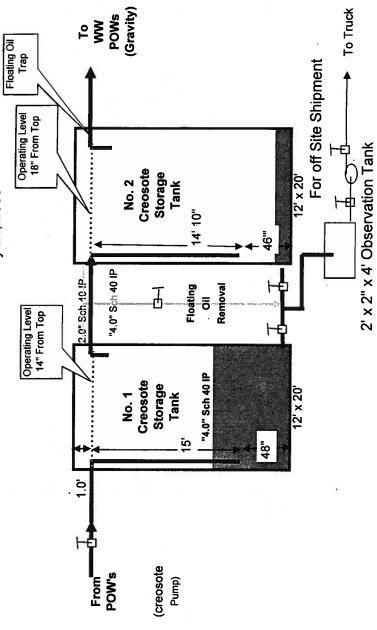
Stephen A. Ladner Project Manager

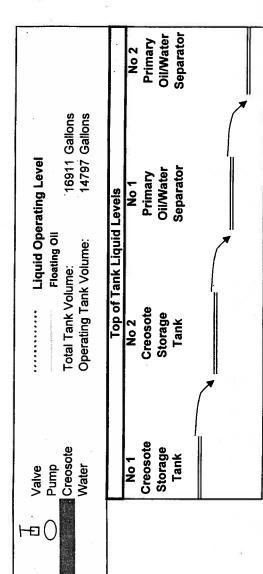
cc: Nick Bock T.L. Cubbage

1/16/2004 3:29 PM







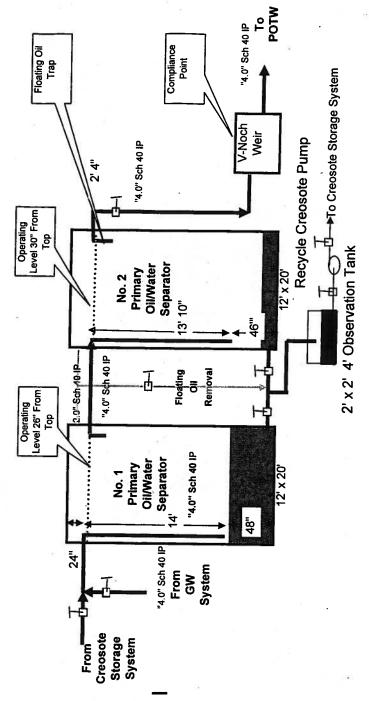


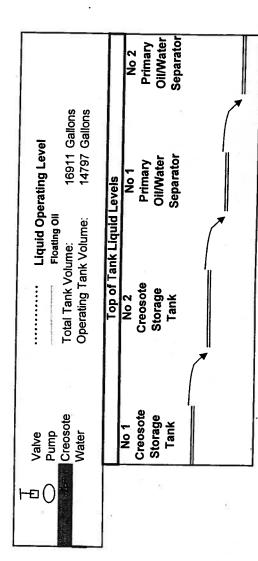
Primary Oil Water Separators Columbus, MS

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February 20, 2003







September 30, 2003

Mr. Louis Crawford, P.E. Environmental Engineer Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Facility 2003 Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Crawford:

Enclosed, please find two copies of the *2003 Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1 of the Permit. The Permit requires a semi-annual report evaluating the performance of the corrective action to be submitted by October 1 of each year.

Please note that a portion of the work completed to date for the groundwater assessment currently in progress at the facility is presented in this report. The remainder of the work, including receipt and review of groundwater monitor well analytical data, will be conveyed to the MDEQ in a future presentation.

If you have any questions or require additional information concerning the contents of this report, please do not esitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/TWR

Enclosures

cc: R. Murph

T. Reed







UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 1 5 2003

Mr. Stephen A. Ladner Senior Staff Environmental Specialist Kerr-McGee Chemical LLC Kerr-McGee Center P. O. Box 25861 Oklahoma City, OK 73125



Dear Mr. Ladner:

We have received your letter of August 22, 2003 regarding the closure of your domestic wood preserving operations. In accordance with your request, we are withdrawing the following six facilities from the National Environmental Performance Track:

Kerr-McGee Chemical LLC, Madison, IL Kerr-McGee Chemical LLC, Springfield, MO Kerr-McGee Chemical LLC, Texarkana, TX Kerr-McGee Chemical LLC, Columbus, MS Kerr-McGee Chemical LLC, Indianapolis, IN Kerr-McGee Chemical LLC, The Dalles, OR

We regret that our relationship with these facilities is ending. Thank you for Kerr-McGee's participation in Performance Track and for your company's many efforts to improve its environmental performance. If you have any additional questions or comments about Performance Track, please feel free to contact me at (202) 566-2869 or <a href="mailto:first:f

Sincerely,

Daniel J. Fiorino

Director, Performance Incentives Division

cc: Connie Raines, EPA Region IV
Mark Messersmith, EPA Region V
Craig Weeks, EPA Region VI

Chilton McLaughlin, EPA Region VII
Bill Glasser, EPA Region X
Don Watts, MS DEQ
Angela Tin, IL EPA
Marc Hancock, IN DEM
Rob Borowski, TX CEQ
Tod Crawford, MO DNR
Marianne Fitzgerald, OR DEQ



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

FILE COPY

February 28, 2003

Mr. Stephen A. Ladner Staff Environmental Specialist Kerr-McGee Chemical LLC P.O. Box 25861 Oklahoma City, OK 73125

Dear Mr. Ladner:

Re:

2002 Corrective Action Performance

Evaluation Report

Kerr-McGee Chemical LLC

Columbus, Lowndes County RCEA Compliance File

MSD 990 866 329

Review has been completed of the referenced document. Based on the monitoring results in this report, as well as past reports, it is apparent that there is an area of groundwater contamination in the northeastern portion of the property.

Per our discussions in our meeting February 18, 2003, Kerr-McGee will be developing a modification to the site Corrective Action Plan to address this release and submitting this workplan with a proposed schedule of implementation by April 15, 2003.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc: Mr. Russ McLean, EPA Region 4

1696 PER20000005



February 26, 2003

Mr. Louis Crawford, P.E. Environmental Engineer Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Facility 2002 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Crawford:

Enclosed, please find two copies of the 2002 *Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1,2. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/TWR Enclosures

CC:

R. Murphey

T. Reed





STATE OF MISSISSIPPI DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

January 15, 2003

FILE COPY

Mr. Stephen A. Ladner Staff Environmental Specialist Kerr-McGee Chemical LLC P.O. Box 25861 Oklahoma City, OK 73125

Dear Mr. Ladner:

Re: Co

Corrective Action Report

Second half, 2002

Kerr-McGee Chemical LLC Columbus, Lowndes County

MSD 990.866 329 RERA Compliance File

Review has been completed of the referenced document. Based on the monitoring results in this report, as well as past reports, it is apparent that there is an area of groundwater contamination in the northeastern portion of the property, i.e., in the vicinity of CMW31. There is also evidence of contamination near CMW27.

Since it appears that the existing corrective action program is not effectively removing and/or controlling the release at the site, we request that per Permit Condition V.H. Kerr-McGee Chemical develop a modification to the site Corrective Action Plan to address this release. A workplan with a proposed schedule of implementation must be submitted no later than April 15, 2003.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc:

Mr. Russ McLean, EPA Region 4

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1696 PER20000005







DAVID RONALD MUSGROVE, GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

December 16, 2002

Mr. Ron Murphey Plant Manager Kerr McGee Chemical Corporation 2300 14th Avenue North Columbus, Mississippi 39701

Dear Mr. Murphey:

Re: Inspection Report

Kerr McGee Chemical Corporation, Columbus Hazardous Waste-EPA ID MSD990866329

Enclosed is a copy of the Compliance Evaluation Inspection report completed as a result of this office's inspection at Kerr McGee Chemical Corporation, Columbus on August 22, 2002. The report should be used by you as a guide for complying with requirements and conditions of applicable hazardous wastes regulations.

If you have any questions concerning this matter, please contact me at 601-961-5123.

Sincerely,

Larry Hamil

Timber & Wood Products Branch

Environmental Compliance and Enforcement Division

Enclosure

Agency Interest No. 1696 INS20020001



KERE - M: GEZ - COLUMBUS LOWNDES COUNTY RCRA - COMPLIANCE



September 30, 2002

Mr. Louis Crawford, P.E. Environmental Engineer Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

DEPT OF ENVIRONMENTAL QUALITY REC'D

OCT 0 2 2002

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Facility 2002 Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Crawford:

Enclosed, please find two copies of the 2002 Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1 of the Permit. The Permit requires a semi-annual report evaluating the performance of the corrective action to be submitted by October 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR

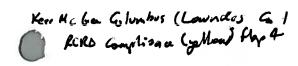
Enclosures

CC:

R. Murphey

T. Reed





March 5, 2002

Mr. Stephen A. Ladner Staff Environmental Specialist Kerr-McGee Chemical LLC P.O. Box 25861 Oklahoma City, OK 73125

FILE COPY

Dear Mr. Ladner:

Re: Corrective Action Effectiveness Report

Second half, 2001

Kerr-McGee Chemical LLC

Columbus, Lowndes County

MSD 990 866 329

Review has been completed of the referenced document. Based on the monitoring results in this report, as well as past reports, it is apparent that there is an area of groundwater contamination in the northeastern portion of the property, i.e., in the vicinity of CMW31.

Since it appears that the existing corrective action program is not effectively removing and/or controlling the release in this area, we request that per Permit Condition V.H. Kerr-McGee Chemical propose a modification to the site Corrective Action Plan to address this release.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc: Mr. Russ McLean, EPA Region 4 (via e-mail)

d22:RCRA/gw2h00-1



February 28, 2002

Mr. Louis Crawford, P.E. Environmental Engineer Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Facility 2001 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Crawford:

Enclosed, please find two copies of the 2001 *Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision V.G.1. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL LLC FOREST PRODUCT DIVISION

STEPHEN A. LADNER Staff Environmental Specialist

SL/TWR Enclosures

CC:

R. Murphey

T. Reed





STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR October 25, 2001

Mr. Stephen A. Ladner Staff Environmental Specialist Kerr-McGee Chemical LLC P.O. Box 25861 Oklahoma City, OK 73125

FILE COPY

Dear Mr. Ladner:

Re:

Corrective Action Effectiveness Report

First Half, 2001

and

Supplemental Groundwater Boundary Investigation

Kerr-McGee Chemical LLC Compliance file (slbm) (5 lsp 4)

Columbus, Lowndes County

MSD 990 866 329

Review has been completed of the referenced documents and we have the following comments:

- Monitoring Well CMW27 is designated in the permit as an Effectiveness Well, not a 1. Boundary Control Well. Since no required monitoring was missed, there is no need for action at this time.
- The Supplemental Groundwater Investigation does indicate the potential for contamination 2. in the vicinity of CMW31. We therefore request that sampling of this well and CMW-34 be conducted during the next regularly-scheduled semi-annual monitoring event.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc:

Mr. Russ McLean, EPA Region 4 (via e-mail)

Mr. Larry Hamil, DEQ/OPC/ECED (via e-mail)

d22:RCRA/gw1h01-1



October 1, 2001



Mr. Louis Crawford, P.E.
Office of Pollution Control
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, Mississippi 39289 - 0385

Re: Kerr-McGee Chemical LLC -Forest Products Division Columbus Mississippi Facility
Groundwater Boundary Well Investigation

Dear Mr. Crawford:

Enclosed please find one copy of the analytical sampling for the recent groundwater Boundary Well investigation for the Kerr-McGee Chemical LLC facility located in Columbus, Mississippi. A location map, designated as Figure 6, is included for your information. Based on the results of this investigation, KMC LLC believes that the conditions have been satisfied for delineating of the boundary of the groundwater plume. Please review the enclosures and provide your recommendations.

If you have any questions concerning this proposed groundwater investigation program, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL CORP. FOREST PRODUCT DIVISION

STEPHEN A. LADNER
Staff Environmental Specialist

SL

Attachment

c: Mr. Russ McClean, USEPA - Region IV

R. Murphey

T. Reed

N. Bock



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08/23/2001

Date: Page:

Southwest Laboratory of Oklahoma, Inc. Laboratory Results Summary Report Project: GWM

Client:

1 0 3001 OCT 占 08/01/2001 100 U 250 U 100 U 250 U 100 U 100 U 100 U 100 U 60 J 100 U 100 U 100 U 300 74 J 750 47194.04 GWMCMW31 08/01/2001 47194.04 GWMC/WW31 08/01/2001 47194.03 GWMCMW34 RE 08/01/2001 47194.02 1111118111111111111 GWMCMW33 08/01/2001 47194.02 110 110 110 110 110 110 110 110 GWMC/MW33 08/01/2001 47194.01 100 100 100 100 100 100 100 100 100 GWMCMW32 Sample Point-> Sample Date-> LAB#-> Units SEMIVOLATILE ORGANICS ANALYSIS 2,3,4,6-Tetrachlorophenol 4-Chloro-3-methylphenol Indeno (1, 2, 3-cd) pyrene Dibenz (a,h) anthracene 2,4,6-Trichlorophenol Benzo(b)fluoranthene 2,4-Dimethylphenol Benzo (a) anthracene 2,4-Dinitrophenol **Pentachlorophenol** Benzo(a)pyrene Acenaphthylene WATER 2-Chlorophenol Phenanthrene Fluoranthene Naphthalene Parameters Carbazole Matrix: Phenol

U: ANALYZED BUT NOT DETECTED See enclosure for additional qualifiers LMW1.ONNYYNNN



BNA, Inc.

Environment

REPORTER

Volume 32 Number 12 Friday, March 23, 2001 ISSN 1521-9410 Page 537

News

Waste Management

Toxic Substances
Neighbors of Wood Treatment Facility
Sue Over Personal Injury, Property Damage

Mississippi residents filed a putative class action against chemical manufacturer Kerr-McGee Corp. on March 7, claiming creosote and other hazardous chemicals released from a wood treatment facility caused personal injuries and property damage (*Conner v. Kerr-McGee Corp.*, N.D. Miss., No. 1:01 CV77-DA, 3/7/01).

The complaint in the U.S. District Court for the Northern District of Mississippi seeks certification of personal injury, medical monitoring, and property damage classes. Plaintiffs contend the facility in Columbus, Miss., which treats about 40 percent of the railroad ties in the country, caused air, soil, and ground water contamination.

"The contamination from operations at Kerr-McGee occurs at numerous points during the wood treatment process. Drips, spills, leaks, accidents, air emissions and waste disposal practices throughout the years and continuing into the present have led to widespread contamination of the plant site and neighboring community," plaintiffs' attorney Hunter Lundy said in a statement. Lundy is with Lundy & Davis in Lake Charles, La.

The plaintiffs seek certification of all classes under Federal Rule of Civil Procedure 23(b) (3), and additional certification of the medical monitoring class under Fed. R. Civ. P. 23 (b)(2).

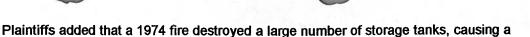
Kerr-McGee Spokeswoman Debbie Schramm said in a statement, "We are confident that our operations have not harmed anyone, and we believe that the facts will speak for themselves as we vigorously defend the lawsuit." She added, "Our Columbus facility has been nationally recognized by the [Environmental Protection Agency] and the [Occupational Health and Safety Administration] for its environmental responsibility and safe operations."

Open Since 1928

The wood treatment plant, which has been in operation since 1928, was acquired by Kerr-McGee in 1964. Plaintiffs claim Kerr-McGee treated railroad ties, switch ties, crossings, and pilings with creosote and other chemicals. Although Kerr-McGee discontinued the use of pentachlorophenol in 1978, it continues to treat wood with creosote, plaintiffs alleged.

Plaintiffs claimed pentachlorophenol and creosote tank cars were improperly unloaded from the bottom, causing chemicals to spill onto the ground and eventually into ground water near the loading dock area. An unlined impoundment, used to contain hazardous wood treatment waste, resulted in ground water contamination, the plaintiffs alleged.

major spill.



According to the complaint, toxic releases also generated elevated atmospheric concentrations of chemical vapors, particulates, and aerosols in the surrounding area.

The plaintiffs alleged the main sources of air contamination within the wood treatment facility include toxic vapors released from treated ties and poles stored at the facility, toxic vapors discharged during cylinder charges, high metal concentrations released from sludge drying beds, and vapors from waste-liquid impoundments containing creosote constituents and other chemicals.

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Columbus pollution case moved to federal court

THE ASSOCIATED PRESS

COLUMBUS, Miss. -A church's lawsuit alleging a Kerr-McGee forest products plant in Columbus has contaminated surrounding property apparently has bounded to federal court.

Attorneys for Maranatha Faith Center said they learned late last week that Kerr-McGee had moved to have the case removed from state court.

The decision apparently stemmed from wording in filings by the church that if contamination is proven, the area would be declared a federal Superfund site.

Maranatha contends the plant on 14th Avenue North discharges pollutants into drainage ditches extending through nearby church property.

Maranatha had argued the case should remain in Hinds County because the state's pollution watchdog agency, the state Department of Environmental Quality, is headquartered in the capital city.

The more than 70-year-old plant, owned by Kerr-McGee since a 1964 purchase from Moss-American, uses the wood preservative creosote to prepare timber for use as railroad crossties.

The lawsuit had been in Hinds County Chancery Court, with well-known attorney Johnnie Cochran as one of the lawyers representing Maranatha.

A Hinds County chancery judge last month agreed with an argument by Kerr-McGee that the dispute should be heard in Lowndes County, where the alleged pollution occurred.

Attorney Orlando Richmond of West Point, representing the church, said a hearing had been scheduled for Monday before a chancery judge dealing with Maranatha's attempt to prevent foreclosure on the church by trustees of a bonding company.

Richmond said that a proposed expansion of the church was financed by bonds but that the payments are in a past due status.

He said the expansion has been on hold pending the outcome of the legal dispute over alleged contamination of the area in the vicinity of the plant.

Richmond said that the basis for the shift to federal court was that Maranatha, in making the motion for an injunction in the foreclosure case, had also asked that the location be declared a Superfund site if contamination is found.

Congress established the Superfund program in 1980 to locate, investigate and clean up the worst polluted sites nationwide.

The Environmental Protection Agency administers the Superfund program in cooperation with individual states and tribal governments.

Gordon Flowers, a local attorney representing Kerr-McGee, said there was nothing unusual about the request to move the case to federal jurisdiction.

"We look at is as simply having it in the right court based on the relief the plaintiffs recently requested," Flowers said of the Superfund issue.

Asked whether Maranatha has a smoking gun based on scientific study to show pollution has occurred, Flowers said, "We don't think so and we think when the case is actually presented in court that will be very clear."

The federal docket in Aberdeen identifies the defendants in the Maranatha case as Kerr-McGee Corp., Kerr-McGee Chemical, Moss-American, T.J. Moss Tie Co., American Creosoting, the state Department of Environmental Quality, Sanderson Plumbing Products Inc. and Columbus Cemetery and Investments Co.

The suit also lists as defendants unnamed persons who approved of the practices that allegedly caused contamination of the church property.



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

March 2, 2001

Mr. Stephen A. Ladner Staff Environmental Specialist Kerr-McGee Chemical LLC P.O. Box 25861 Oklahoma City, OK 73125

FILE COPY

Dear Mr. Ladner:

Re: Corrective Action Effectiveness Report

Second half, 2000

Kerr-McGee Chemical LLC Columbus, Lowndes County

MSD 990 866 329

Review has been completed of the referenced document and we have the following comment:

We still have some concerns regarding the contamination at Monitoring Well CME29. We recommend that investigatory work be performed to determine is this is indeed a separate small plume as indicated on Figures 2 and 3 or if it is a continuation of the main plume. Also, it will be necessary to verify that the contamination is not migrating off-site to the north and/or east of the plant site.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc: Mr. Russ McLean, EPA Region 4 (via e-mail)

d22:RCRA/gw2h00-1





February 27, 2001

Mr. Bruce Ferguson Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical Corporation -Forest Products Division Columbus Mississippi Facility 2000 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Ferguson:

Enclosed, please find two copies of the 2000 *Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision IV.H.11. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL CORP. FOREST PRODUCT DIVISION

STEPHEN A. LADNER

Staff Environmental Specialist

SL/TWR

Enclosures

CC:

R. Murphey

T. Reed







February 27, 2001

Mr. Bruce Ferguson Office of Pollution Control 2380 Highway 80 West Jackson, Mississippi 39204

Re: Kerr-McGee Chemical Corporation -Forest Products Division Columbus Mississippi Facility 2000 Annual / Semi-Annual Corrective Action Performance Evaluation Report and Groundwater Monitoring Report HW-90-329-01

Dear Mr. Ferguson:

Enclosed, please find two copies of the 2000 *Annual / Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report* submitted in compliance with 40 CFR Section 265.94, and as referenced in provision IV.H.11. of the Permit. The Permit requires an annual report on the groundwater monitoring program, and a semi-annual report evaluating the performance of the corrective action to be submitted by March 1 of each year.

If you have any questions or require additional information concerning the contents of this report, please do not hesitate to contact me at (405) 270-2625.

Sincerely,

KERR-MCGEE CHEMICAL CORP. FOREST PRODUCT DIVISION

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR

Enclosures

cc: R.

R. Murphey T. Reed











STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

January 22, 2001

Morris Amous 2247 Ridge Road Columbus, MS 39701

Dear Mr. Amous:

Re: Kerr-McGee Chemical Corporation

Columbus, MS Lowndes County

I am responding to your complaint concerning contamination in ditches that drain from this site.

Attached is a report describing our investigation conducted on July 1, 1999. I apologize for the delay in getting this report to you. The report contains information on locations sampled by our staff and contaminant concentrations found and cleanup standards used as guidance by this agency. It may not be readily apparent how to interpret this information. If you have questions on these results, feel free to contact me.

After the contamination was identified in the ditches, it was apparent that further investigation would be necessary to determine the extent of the contamination and whether removal would be necessary. This agency deferred this decision to EPA's Atlanta office because we do not presently have the authority under the hazardous waste regulations to require Kerr-McGee to conduct this investigation. EPA has issued Kerr-McGee a post-closure hazardous waste permit that dictates certain requirements for the continued cleanup of contamination from the closed surface impoundment. Under the authority of this permit, EPA can require the company to investigate past releases from the impoundment or other units on the plant property. EPA is currently working with Kerr-McGee to further investigate the drainage ditches leaving the plant site. A decision on any potential cleanup will be made after Kerr-McGee completes additional sampling studies on the ditches.

If you wish to contact EPA, the current contact for this project is Russ McLean at 404.562.8504. If you wish to contact me, my phone number is 601.961.5377.

Sincerely

David E. Lee, P.E., Chief

David Low

Timber Branch, Compliance Division

cc: Don Watts

Larry Hamil



Memo

To:

File

From:

Bruce Ferguson, Russ Twitty, Wayne Stover, and Kevin Posey

CC:

Kirk Shelton

Date:

8/25/99

Re:

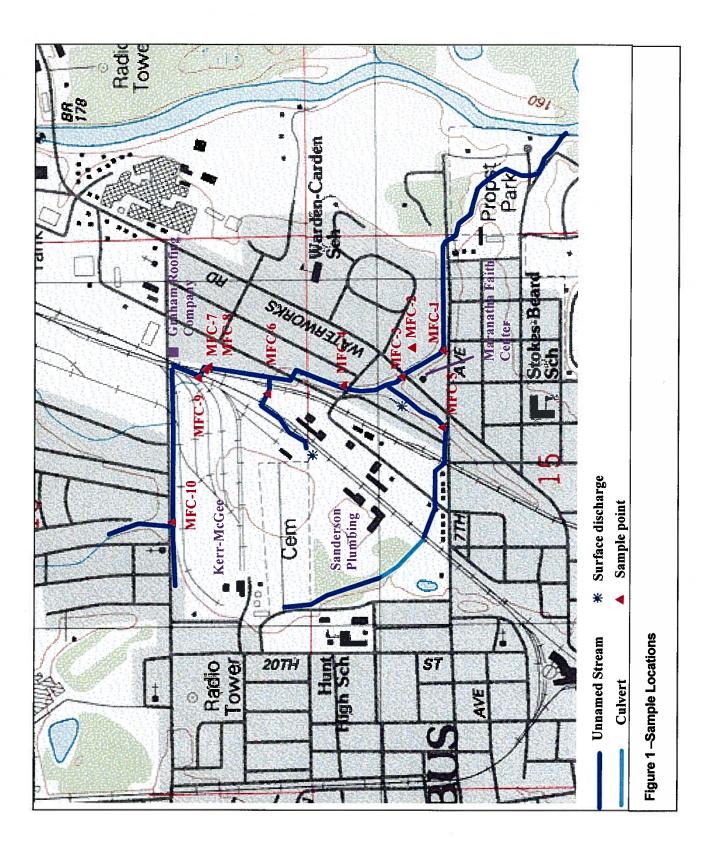
Maranatha Sampling Event

Background

The Maranatha Faith Center is located on Waterworks Road in Columbus, Mississippi. The Center was undergoing construction activities replacing an old existing riveted metal culvert with a new concrete box culvert when apparent contamination was found in the sediments that had accumulated in the existing culvert. Kerr-McGee Chemical Corporation, which is located nearby, collected the sediments in roll-off boxes and moved them to the Kerr-McGee facility. In response to complaints by the Maranatha Faith Center, the North Regional Office visited the site (see memo dated May 27, 1999). Additionally, Richard Harrell and Bruce Ferguson of the MDEQ collected samples from the roll-off boxes and the removed culvert. (See memo dated June 4, 1999). On July 1, 1999, the Site Sampling Team of the Mississippi Office of Pollution Control collected sediment samples from the ditch that passes the Maranatha Faith Center.

Site Description

The Maranatha Faith Center is located in North Columbus. The area is a mixture of residences and commercial operations. The ditch running through the Maranatha Faith Center property can be seen in Figure 1. Based on subjective site observations, the majority of the flow on the day of the sampling event originated from a contributing ditch flowing south to the northern property boundary of the Kerr-McGee facility. While the origins of this ditch were not traced, the area surrounding the ditch appeared to be residential. At the Kerr-McGee property boundary, the flow traveled east along 14th Avenue to the railroad tracks. The flow then moved south along the western side of the railroad tracks for about 200 feet where it passed under two sets of railroad tracks and then turned south along the east side of the tracks. Approximately midway between 14th Avenue and Marvin Street another ditch contributes to the flow. This ditch originates at the NPDES discharge for Sanderson Plumbing. The flow continues south approximately 150 feet before reaching Waterworks Road where another ditch contributes to the flow. This ditch originates at the southwestern portion of the Kerr-McGee facility. This ditch flows across the Sanderson Plumbing property into a culvert that is approximately 500 feet long. Prior to entering the ditch that flows past the Maranatha Faith Center, this ditch receives a discharge from an ice plant. The flow that passes the Maranatha Faith Center eventually discharges into Luxipallila Creek.



Sampling

sample location were homogenized to produce the final sample with the exception of MFC-1. The Nine sediment samples were taken from the ditches in the area and one sample was taken from the buckets and transferred to a pyrex dish where the sample was homogenized. Two buckets from each the four quarters were mixed using a stainless steel mixing spoon. The samples were then transferred to pre-cleaned glass sample containers with teflon lined lids. Chuck Swann with Kerr-McGee was coating of the removed culvert. The sediment samples were collected with 6" stainless steel auger sample was homogenized by quartering the sample dish, each quarter was thoroughly mixed, and then provided with splits of the samples in jars supplied by Kerr-McGee. Figure 2 shows the sample location for MFC-1. The view in the photograph is facing west with 7th Avenue in the background. MFC-1 was collected from the ditch at the intersection of N 7th Avenue and N 26th Street. An open sided auger bucket was used at this location. On the day of the sampling, there the water flow prevented the use of the full length of the auger bucket. At this location the auger was advanced until the sediments reached the opening in the side of the auger. Four partial buckets were was a substantial flow in the ditch. The sediments at this location were not cohesive and the velocity of collected to produce the final sample. While being mixed, the sample emitted a strong hydrocarbon



Figure 2 - MFC-1.



Figure 3 - MFC-2.

a bituminous coating. A sample of this coating was collected by scraping the culvert with a stainless steel mixing spoon. The Maranatha Faith Center can be seen in the background of the photograph. The view of the photograph is facing southwest with Waterworks road on the right side of the The removed culverts can be seen in Figure 3. The culverts were riveted metal that appeared to have photograph



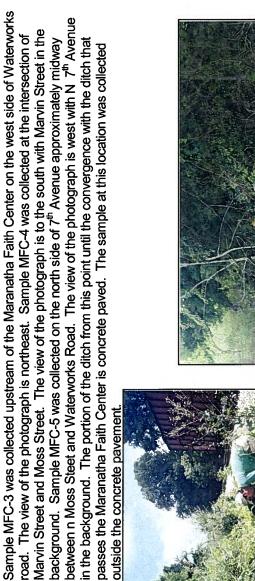




Figure 5 - MFC-4.



Figure 6 - MFC-5.







converges on the west side of Moss Street with the ditch that passes the Maranatha Faith Church. The view of the photograph is facing north. Sample MFC-7 was collected in the ditch south of 14th Avenue behind the former Graham Roofing site east of the railroad tracks. Sample MFC-8 was also collected Sample MFC-6 was collected on the upstream side of the culvert that passes under the eastern most railroad track adjacent to Moss Street. This ditch flows from the Sanderson Plumbing discharge and at this location. The view of the photograph is north.



Figure 9 - MFC-8.

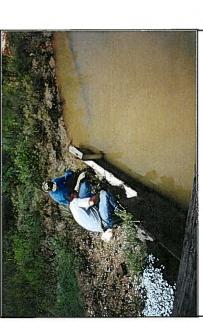


Figure 10 - MFC-9.



Figure 10 - MFC-10.

Samples MFC-7 and MFC-8 were collected in the same vicinity. Adjacent to the Graham Roofing property the ditch contained a hard substance in the bottom. Figure 9 shows the material that was removed with the auger bucket. An entire bucket of the material was removed without breaking through, therefore the material was greater than six inches thick. Sample MFC-9 was collected south of 14th Avenue between the railroad tracks and the Kerr-McGee property. The view of the photograph is facing west. Sample MFC-10 was taken in the ditch that runs along 14th Avenue adjacent to the Kerr-McGee property line. The view in the photograph is facing southwest.

Sampling Results

The samples collected were analyzed for semi-volatiles at the Office of Pollution Control Laboratory. Results of the analysis that were above detection levels are summarized in Table 1. No semi-volatile constituents were detected in sample MFC-2, the culvert coating, or MFC-8, the material in the ditch behind Graham Roofing.

Table 2 summarizes the maximum detected concentration with

screening level when transported to the respective media using the methodology of the "Soil Screening Guidance: Technical background Document," EPA/540/R-95/128, May 1996. The saturation column exist. The surface water screening levels represent screening values presented for hazardous waste sites in Office of Technical Services Supplemental Guidance to RAGS: Region 4 Bulletins, October, Considering Migration" column represents a level in the soil that will achieve the corresponding generic under this heading represents a concentration in the soil above which free product contamination would

Table 1 - Sampling Results Above Detection Limit in PPM

1,4-dimethylnaphthalene 1-ethylnaphthalene 2,3-dimethylnaphthalene 2,6-dimethylnaphthalene 2-methylnaphthalene 4-methyldibenzofuran 4-methyldibenzofuran acenaphthene acenaphthene acenaphtylene benzo(a)anthracene benzo(a)fluorene benzo(a)hylingarthaga								0.33
976								3
9 9								9.56
900								9.84
eu								20.1
								20.6
								57.6
acene ne e e								9.93
acene ne e e				0.33				
acene ne e e	28.5	0.33			0.33		4.74	184
ane or	0.33	0.33	0.33		0.33	0.33		6.4
ane ane		0.33	0.33		0.33	0.33	3.32	21.5
9	38.7	3.48	3.68		22.4	4.16	3.33	39
9								6.56
hone	15.3	0.33	0.33		19.9	7.93	0.33	14.8
	24.9		5.93		0.33	13.9	0.33	24.2
	5.12	0.33	0.33		0.33	3.9		0.33
benzo(k)fluoranthene	7.56	4.14	0.33		0.33	4.09	0.33	8.13
biphenyl								24.6
bis(2-ethylhexyl)phthalate			0.33					
carbozole	0.33				0.33			29
chrysene	31.9	3.7	5.52		19.4	5.46	0.33	28.3
di-n-octylphthalate				8.11				
dibenz(a,h)anthracene	0.33							
dibenzofuran	24.8	0.33			0.33		4.2	118
fluoranthene	95.1	9	7.2		56.9	4.12	14.6	152
fluorene	49	0.33			0.33		6.12	150
indane								
indeno(1,2,3-cd)pyrene	97.9	0.33	0.33		0.33	3.8		0.33
Napthalene	0.33	0.33				0.33		29.7
:	i 1	((, ,	((((i (1

Table 2 - Maximum Level Detected with Generic Screening Levels

		Generic	Generic Screening Levels	<u>s</u>	Levels Considering Migration	nsidering ∧	Aigration	Surface Water Screening Levels	r Screening	Levels
Parameter	Maximum Concentration	Soil mg/kg	Water mg/l	Air ug/m³	To Water mg/kg	To Air mg/kg	Saturation mg/kg	Fresh Water S ug/l	Salt Water S ug/l	Sediment mg/kg
Acenaphthene	2.85E+01	4.80E+03 N	2.10E+00 N	2.10E+02 N	4.20E+02	4.00E+04	4.24E+01	1.70E+01	9.70E+00 9.70E+00	3.30E-01
Anthracene	2.15E+01	2.40E+04 N	1.05E+01 N	1.05E+03 N	8.44E+03	7.08E+05	1.74E+00		30.75	3.30E-01
Benzo[a]pyrene	1.99E+01	9.59E-02 C	2.00E-04 MCL	1.13E-03 C	7.13E+00	6.27E+01	2.89E+00			3.30E-01
Benzo[b]fluoranthene	2.49E+01	9.59E-01 C	4.79E-06 C	1.13E-02 C	1.54E-01	1.03E+02	2.41E+00			
Benzo[g,h,i]perylene	5.12E+00									
Benzo[k]fluoranthene	8.13E+00	9.59E+00 C	4.79E-05 C	1.13E-01 C	1.51E+00	8.60E+03	1.26E+00			
Benz[a]anthracene	3.90E+01	9.59E-01 C	4.79E-06 C	1.13E-02 C	6.87E-02	2.46E+02	6.73E+00			3.30E-01
1,1-Biphenyl	2.46E+01	4.00E+03 N	1.75E+00 N	1.75E+02 N	1.40E+02		5.61E+01			
Chrysene	3.19E+01	9.59E+01 C	4.79E-04 C	1.13E+00 C	5.05E+00	6.10E+03	8.42E-01			3.30E-01
Dibenzofuran	2.48E+01	3.20E+02 N	1.40E-01 N	1.40E+01 N	6.40E+01		2.29E+02			
Dibenzofuran	1.18E+02	3.20E+02 N	1.40E-01 N	1.40E+01 N	6.40E+01		2.29E+02			
Dibenz[a,h]anthracene	3.30E-01	9.59E-02 C	2.00E-04 MCL	1.13E-03 C	1.43E+01	1.94E+02	8.91E+00			3.30E-01
Di(2-ethylhexyl)phthalate	3.30E-01	5.00E+01 C	6.00E-03 MCL	2.50E-01 C	2.67E+01	1.11E+04	7.55E+01	3.00E-01		1.82E-01
Fluoranthene	9.51E+01	3.20E+03 N	1.40E+00 N	1.40E+02 N	2.34E+03	2.80E+05	1.72E+01	3.98E+01	1.60E+00	3.30E-01
Fluoranthene	1.52E+02	3.20E+03 N	1.40E+00 N	1.40E+02 N	2.34E+03	2.80E+05	1.72E+01	3.98E+01	1.60E+00	3.30E-01
Fluorene	4.90E+01	3.20E+03 N	1.40E+00 N	1.40E+02 N	4.02E+02	5.37E+04	2.84E+01			3.30E-01
Fluorene	1.50E+02	3.20E+03 N	1.40E+00 N	1.40E+02 N	4.02E+02	5.37E+04	2.84E+01			3.30E-01
Indeno[1,2,3-cd]pyrene	6.76E+00	9.59E-01 C	4.79E-06 C	1.13E-02 C	4.56E-01	1.29E+03	1.05E-01			
4-Methylphenol	3.30E-01	4.00E+02 N	1.75E-01 N	1.75E+01 N	3.74E+00		2.56E+04			
Phenanthrene	6.75E+01									3.30E-01
Phenanthrene	1.85E+02									3.30E-01
Pyrene	1.13E+02	2.40E+03 N	1.05E+00 N	1.05E+02 N	3.34E+03	3.63E+05	2.15E+01			3.30E-01
Pyrene	1.66E+02	2.40E+03 N	1.05E+00 N	1.05E+02 N	3.34E+03	3.63E+05	2.15E+01			3.30E-01
2-methylnaphthalene	5.76E+01	3.20E+03 N	1.40E+00 N							3.30E-01
1-methylnaphthalene	9.84E+00	5.60E+03 N	2.45E+00 N							
			1000							

N – Screening Level based on non-carcinogenic effects C – Screening Level based on carcinogenic effects MCL – Maximum Contaminant Level

Decontamination Procedures

During the sampling event field sampling equipment was decontaminated by:

- 1. cleaning with tap water and phosphate free detergent using a brush if necessary to remove particulate matter and surface films,
- rinsing thoroughly with tap water,
- 3. rinsing thoroughly with de-ionized water,
- 4. rinsing thoroughly with isopropyl alcohol,
- 5. allowing the equipment to air dry, and
- 6. wrapping the equipment with aluminum foil.