5.

No time limit shall be extended by the Mississippi Department of Environmental Quality unless such extension is in writing and signed by the Executive Director of the Mississippi Department of Environmental Quality.

6.

Nothing contained in this Agreed Order shall limit the rights of the Complainant to take enforcement or other actions against Respondent for violations not addressed herein and for future violations of environmental laws, rules and regulations.

7.

Respondent neither admits nor denies the allegations set forth herein.

8.

Respondent understands and acknowledges that it is entitled to an evidentiary hearing before the Commission pursuant to Section 49-17-31 of the Mississippi Code Annotated (1972), as amended, and that it has made an informed waiver of that right.

ORDERED, this the _____ day of _____, 1994.

MISSISSIPPI COMMISSION ON
ENVIRONMENTAL QUALITY

BY: _____
J. I. PALMER, JR
EXECUTIVE DIRECTOR
MISSISSIPPI DEPARTMENT
OF ENVIRONMENTAL QUALITY

ACCEPTED AND AGREED TO, this the ____ day of _____, 1994.

RESPONDENT
KERR-McGEE CHEMICAL CORPORATION

BY: _____

TITLE:_____

MISSISSIPPI DEPARTMENT OF ENVIRONMENT QUALITY
RCRA INSPECTION REPORT
COMPLIANCE EVALUATION INSPECTION
KERR-MCGEE CHEMICAL CORPORATION
COLUMBUS, MISSISSIPPI

1. **Inspector and Author of Report**
   Kirk Shelton, Environmental Administrator
   Mississippi Office of Pollution Control (MOPC)

2. **Facility Information**
   Kerr-McGee Chemical Corporation (KMCC)
   Forest Products Division
   P.O. Box 906
   Columbus, Mississippi 39701
   MSD990866329

3. **Responsible Company Official**
   Ron Murphy, Kerr-McGee Chemical Corporation

4. **Inspection Participants**
   Ron Murphy, KMCC
   Chuck Swann, KMCC
   Mindy Gardner, Region IV EPA
   Kirk Shelton, MOPC

5. **Date and Time of Inspection**
   July 16, 1999, 8:30 a.m.- 6:00 p.m. CST.

6. **Applicable Requirements**
   Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 264, 265, 268, and 279 the facility's Hazardous Waste Post-Closure Permits No. HW -90-139-01.

7. Facility Description

The site now occupied by Kerr-McGee Chemical Corporation has been used as a wood treating facility since 1928. KMCC acquired the site in 1964 and continued to produce treated railroad ties, switch ties, crossings, and pilings using creosote as a preservative. Pentachlrophenol was also used as a preservative prior to 1976. The wood comes in green, is allowed to dry for a period of time, is graded and cut to size and treated in the cylinders. Treated wood is removed from the cylinders to the drip pad. After residual dripping has ceased, treated wood is transported to black tie storage.

The facility is permitted to conduct post-closure and groundwater corrective action activities. In June of 1986, KMCC certified closure of a two hazardous waste surface impoundments, an aeration basin and a sedimentation basin in which bottom sediment sludge from process wastewater accumulated. The surface impoundments were replaced by upgrading production process oil/water separators to recycle preservatives for re-application within the production process. The wastewater is then pumped to the wastewater treatment system which operates under a pretreatment permit and is discharged to the City of Columbus POTW.

The groundwater corrective action system consists of groundwater recovery wells and recovery trenches. Recovered groundwater is pumped to an above ground oil-water separator. After the separation process, the wastewater is sent through the facility wastewater treatment system and discharged to the POTW.

In 1988, KMCC installed a concrete drip pad to collect excess preservative drippage from treated wood after removal from the pressure cylinder. The drip pad operates under Part 265 Subpart W regulations.

The facility has two black tie storage areas. The smaller of the areas is located north of 14th Avenue and the larger area is located south of the 14th Avenue. The facility maintains a contingency plan at the facility for the remediation of incidental spills and drippage and these areas are therefore not subject to Part 265 Subpart W regulations.

The facility is a large quantity generator of hazardous waste. The facility maintains a less than 90 day container storage area for drum storage. The drums contained F034 waste.

A post closure permit was issued in September 1990. On August 1,1995, the post closure permit was modified and issued along with the HSWA portion of the facility's RCRA Permit. Both these permits expire August 1, 2005.

Findings

The regulated units at the facility were visually inspected. The closed surface impoundment area appeared to be in good condition with no sign of erosion of the cover. The fence surrounding the closed impoundment was locked and danger signs were posted.

The ninety day storage contained twenty-four (24) fifty-five (55) gallon drums of F034 waste. All drums were dated and labeled as required. All drums were closed and in good condition. All drums had been in storage less than ninety days.

The drip pad was installed in 1988. In December of 1991, the drip pad was certified by a professional engineer. The drip pad on the north and south side has a four (4) inch curb above the surface of the drip pad. There were cracks on the surface of the curbs but appeared not to be cracks that could cause hazardous waste to be released from the drip pad. There is no curb above the drip pad surface at the end of the drip pad. The drip pad is sloped toward the treatment cylinder containment area. All drippage and wastewater from this area is hard-piped to the treatment area. The Drip Pad Precipitation and wash water from the pad drains to a sump. There are drains along the pad and in the treatment cylinder containment area. The water is then pumped to the wastewater treatment system. The drip pad is pressure washed and manually cleaned weekly. A graveled surface surrounds the drip pad. Stains were noted on the drip pad and just off the end of the drip pad on the graveled surface.

The following violations were noted from the drip pad evaluation:

(1) **It appears the facility has not complied with design and operating requirements which require drip pads to have a curb or berm around the perimeter. This is a violation of 40 CFR 265.443 (a)(3).**

(2) **It appears the facility has not complied with design and operating requirements which require that drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous constituents off the drip pad as a result of activities by personnel or equipment. This is a violation of 40 CFR 265.###.**

During the inspection the following records were reviewed.

- Manifest for 1996-1999;
- Financial assurance;
- Job titles and job descriptions;
- Training Records;
- Container storage area inspection records for 1997-1999;
- Closed surface impoundment inspection records for 1996-1999;
- Drip Pad assessment, clean-up and inspection records for 1996 through 1999;
- Waste Minimization Plan;
- Waste Analysis Plan;
- Notifications; and
- The Contingency Plan.

The following discussion addresses problems and violations found during the records review.

(1) The facility did not have financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the review.

MDEQ recommends that financial assurance documentation be kept onsite at the facility.

(2) A description of training, documentation of training and the directors's qualification were reviewed for 1996-1998. The last training took place on May 15, 1998. Training was scheduled for June 1999. During 1998 Samuel Clemens did not receive training.

It appears the facility has failed to meet the requirement to assure facility personnel has taken part in an annual review of required initial. This is a violation of 40 CFR 265.16(c). However, in a meeting with Kerr McGee on September 2, 1999, the facility indicated Mr. Samuel Clemens was a second shift supervisor and he did not have any Hazardous Waste Management responsibilities therefore training would not be required. Additional information must be submitted by the facility describing all job responsibilities of Mr. Clemens, as well as, an explanation of why Mr. Clemens has received past training.

(3) Permit condition II.D requires that personnel training follow the attached outline, Permit Attachment II-1. The attachment specifically requires review of the Post Closure Care Plan, Permit Attachment III-1.

After the inspection, Kerr McGee provided MDEQ with copies of the Kerr McGee RCRA annual training outline for 1996, 1997 and 1998. Post Closure Care was addressed in the outline of each of these annual training sessions.

(4) Under the requirements for Accumulation time the facility is required to maintain a description of procedures that will be followed to ensure that all wastes are removed from the pad and the associated collection system at least once every 90 days.

After the inspection, Kerr McGee provided MDEQ with a copy of the drip pad and collection system/environmental procedures from the facility emergency response plan with an effective date of 10/01/96. This document addresses the inspections, cleaning of the pad, waste removal, emergency response, stormwater collection, and annual certification.

(5) Assessment of existing drip pad integrity requires that an assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modification necessary to achieve compliance with all of the standards of 264.443 of this subpart are complete. The record of this certification was not found during the inspection.

It appears the facility has failed to meet the requirement of 40 CFR 265.441 for annual certification of the existing drip pad integrity.

(6) The facility had a Spill Prevention Control and Countermeasures Plan (SPCC Plan), dated October 22, 1998, and a contingency plan, dated January 1996. It is required that the contingency plan must list the names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator and that this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in order in which they will assume responsibilities as alternates.

The Kerr McGee Contingency Plan does not include the addresses of emergency coordinators. This represents a violation of 40 CFR 265.52(d)

(7) It is required that the contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. The list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

The Kerr McGee Contingency plan does not include the location of all emergency equipment at the facility and does not provide a brief outline of safety equipment capabilities. This represents a violation of 40 CFR 265.52(e).

(8) It is required that the contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste fires).

The evacuation plan is contained in the Kerr McGee Emergency Response Plan. The plan meets all aspects of the above requirements. MDEQ request Kerr McGee to include the evacuation plan in the Contingency Plan as required.

(9) The requirements of Subpart W are not applicable to the management of infrequent and incidental drippage in the storage yard provided that the owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum the contingency plan must describe how the facility will do the following:
(i) Clean up the drippage;
(ii) Document the cleanup of the drippage;
(iii) Retain documents regarding cleanup for three years; and
(iv) Manage the contaminated media in a manner consistent with Federal regulations.

The facility has a contingency plan for cleaning up incidental drippage. The cleanup is documented and maintained at the facility.

Conclusions

Signatures

_____ _____

Date

_____ _____

Date

RCRA Inspection Report

1) Inspector and Author of Report

Mindy M. Gardner
Environmental Engineer

2) Facility Information

Kerr McGee Chemical Corporation
2300 14th Avenue
Columbus, Mississippi 39701
MSD 990 866 329

3) Responsible Officials

Ronald Murphy	Kerr McGee Chemical Corporation (Kerr McGee) -
Chuck Swann	Kerr McGee

4) Inspection Participants

Mindy M. Gardner	United States Environmental Protection Agency (EPA)
Kirk Shelton	Mississippi Department of Environmental Quality (MDEQ)
Ronald Murphy	Kerr McGee
Chuck Swann	Kerr McGee

5) Date and Time of Inspection

June 16, 1999, 8:30 a.m. - 5:30 p.m.

6) Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 260 through 270. The State of Mississippi adopts by reference the regulations in 40 C.F.R. Parts 260 - 270 and a RCRA Permit (HW-90-329-1) and an EPA HSWA Permit, both of which expire August 1, 2005.

7) Purpose of Inspection

To conduct an unannounced EPA oversight compliance evaluation inspection (CEI) and determine Kerr McGee's compliance with the applicable requirements of Mississippi Hazardous Waste Management Regulations.

8) Facility Description

Kerr McGee manufactures pressure treated railroad products including crossties, switch ties, and timbers using creosote. The Facility is approximately 90 acres and there is no fence on the east side of the facility.

The Facility first notified as a large quantity generator (LQG) on August 18, 1980, with subsequent notifications occurring on October 24, 1991, April 1, 1997, and March 4, 1998. The Facility used a surface impoundment to settle out solids and preservatives from process wastewater before final discharge to the city Publicly Owned Treatment Works. On November 19, 1980, the facility submitted a Part A Permit Application. Groundwater monitoring was initiated in July 1981 and the impoundment was closed in 1986 in accordance with an MDEQ approved Closure Plan. A Part B Application was submitted in March 1987 for post closure care of the surface impoundment and again in September 1987 to include the discovery of dissolved creosote constituents in down-gradient monitoring wells. The Part B Application was resubmitted in April 1990 to include a proposal for the recovery of subsurface creosote product from the alluvial aquifer. A new Part A application was submitted on June 14, 1990 indicating that the surface impoundment was closed . A post-closure permit was issued in September 1990. In August 1995 the post-closure permit was modified and submitted for public comment along with the Hazardous and Solid Waste Amendments of 1984 (HSWA) portion of the permit. Both permits were effective on August 1, 1995, and remain in effect until August 1, 2005.

The post-closure permit requires post-closure care of the closed surface impoundment and corrective action to reduce and prevent further migration of contamination in the groundwater. There is no distinction made between groundwater contamination from RCRA regulated units and HSWA Solid Waste Management Units (SWMUs) . There are forty-seven (47) monitoring wells and twenty-five (26) piezometers in the alluvial and Eutaw aquifers to monitor the groundwater plume containing creosote. The corrective action system uses eleven (11) recovery wells and two (2) recovery trenches to capture the creosote in the groundwater. The HSWA portion of the permit requires corrective action at SWMUs 22, 23, 34, 36, 37, and 38 and any newly identified SWMUs. The RCRA Facility Investigation (RFI) began in November 1995 with submittal of the first RFI work plan. The RFI Report was submitted on March 31, 1997, and in October 1998 the Facility submitted the Phase II Report. Please see Attachment B for a copy of the RFI Phase II Report, which further discusses the corrective action going on at this Facility.

9) Findings

Kerr McGee manufactures pressure treated railroad products including crossties, switch ties, and timbers using creosote. The wood comes in green, is allowed to air dry, is inspected for quality, cut to size, and then treated in one of three treatment cylinders (Photograph 1). Some logs will have splits in the ends and will receive a metal end plate. The cut blocks are distributed to the public for use as firewood. After treatment, process wastewater is hard piped to the wastewater treatment plants enclosed oil water separator. Recovered creosote is reused and the water is subsequently treated prior to discharge to a National Pollutant Discharge Elimination System (NPDES) permitted outfall. The drip pad sweepings and material cleaned out of the treatment cylinder containment area are sent off-site as hazardous waste. Saw dust is taken to a landfill or sold.

Entrance Meeting

On June 16, 1999, Mindy M. Gardner, EPA, and Kirk Shelton, MDEQ, arrived at the Kerr McGee facility at approximately 8:30 a.m. The inspectors were immediately received by Ron Murphy, Plant Manager. The inspectors introduced themselves, showed their credentials, and explained that the purpose of the visit was to conduct a RCRA compliance evaluation inspection. The inspection began with a brief overview of the Facility's current operations and the inspectors proceeded to conduct the physical inspection of the Facility operation with the assistance of Mr. Murphy and Chuck Swann, Environmental Coordinator.

Ninety (90) Day Storage Area

On the day of the inspection, there were twenty-four (24) fifty-five (55) gallon drums in the Ninety Day Storage Area (Photograph 2). All of these drums had been stored for less than ninety (90) days and were labeled as "Hazardous Waste" and F034, in good condition and kept closed.

Drip Pad

The drip pad (Photographs 3,4) is approximately 15,000 square feet and shallowly sloped toward the treatment cylinders. This pad was installed in 1988 and certified by a professional engineer in December 1991. There are drains along the pad and in the treatment cylinder steel lined containment area. Collected drippage and wastewater are hard-piped to the NPDES wastewater treatment plant. There are approximately four (4) inch berms on the north and south side of the drip pad, but no berm is present at the end of the drip pad. The entire pad is surrounded by gravel. It was noted that there were cracks in the surface of the berms on the north and south sides of the drip pad. There was

evidence of staining both on the pad and at the end of the pad on the gravel. There was also heavy staining located on the ground near the treatment cylinders on the south end of the pad.

Kerr McGee failed to adhere to a condition for exemption from RCRA § 3005 given in 40 C.F.R. § 265.443(a)(3), as incorporated by 40 C.F.R. § 262.34(a)(iii). This regulation requires that the drip pad have a curb or berm around the perimeter of the pad to prevent releases to the environment. Therefore, Electric Mills is illegally storing wastes in violation of RCRA § 3005.

A section of the drip pad is pressure washed daily and the whole pad is pressure washed and manually cleaned each week.

It was noted during the inspection that two (2) gates along the north fence line were kept open with no security present. The gate located on the west side of the facility was also open, but a security camera monitors this location. A guard service patrols the facility from 5:00 p.m. until 6:00 a.m. and the gates are locked during this time. The surface impoundment was maintained, the fence surrounding it was locked, and signs were placed on each side that noted "Danger."

Kerr McGee was in violation of 40 C.F.R. § 264.14 because the Facility did not prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the Facility.

Records Review

During the inspection, the inspectors reviewed the following records:

- Manifests for 1996 through 1999;
- Financial assurance;
- Job titles and job descriptions;
- Training descriptions, documentation, and director qualifications;
- Container storage area inspection records for 1997 through 1999;
- Closed surface impoundment inspection records for 1996 through 1999;
- Drip pad assessment, clean up and inspection records for 1996 through 1999;
- Waste Minimization Plan;
- Waste Analysis Plan;
- Notifications; and
- The contingency plan.

The following discussion addresses the problems and violations found during the records review.

Financial Assurance

The Facility did not have financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the records review.

EPA recommends that financial assurance documentation be kept at the actual Facility.

Training

A description of training, documentation of training and the training director's qualifications were reviewed for 1996 through 1998. The last training took place on May 15, 1998. The Facility had training scheduled for June 1999. During 1998, - Samuel Clemens did not receive training.

Kerr McGee was in violation of 40 C.F.R. § 265.16(c) because an employee did not take part in an annual review of the initial training required in paragraph (a) of this section.

Permit Condition II.D. requires that personnel training follow the attached outline, Permit Attachment II-1. This attachment specifically requires review of the Post-Closure Care Plan, Permit Attachment III-1. The Facility training description does not include a discussion of post-closure care.

Kerr McGee was in violation of Permit Condition II.D. for failing to include a post-closure care review in the annual training.

Drip Pad

The Facility did not have a description of the procedures for waste removal from the pad as required by 40 C.F.R § 262.34(a)(iii). The Facility did not have a annual certification for the drip pad for 1997. 40 C.F.R. § 265.441 as incorporated by § 262.34(a)(iii) requires an annual certification of the drip pad for drip pads that do not meet all the requirements of 40 C.F.R. § 265.443, specifically a leak detection and collection system.

Kerr McGee has failed to meet conditions for exemption from RCRA § 3005 by failing to store hazardous waste in compliance with 40 C.F.R. § 262.34(a)(iii) and 40 C.F.R. § 265.441 as incorporated by 40 C.F.R. § 262.34(a)(iii). Therefore, Kerr McGee is illegally storing hazardous waste.

Contingency Plan

The Facility had a Spill Prevention Control and Countermeasures Plan (SPCC Plan), dated October 22, 1998, and a contingency plan, dated January 1996. However, these plans did not contain addresses of the emergency coordinators, safety equipment location map, an emergency excavation plan, or a description of how the owner or operator will respond to the discharge of infrequent and incidental drippage in the storage yards.

Kerr McGee was in violation of 40 C.F.R. § 265.52(d)(e) and (f) because the contingency plan did not include the addresses of the emergency coordinators, a safety equipment location map, or an emergency excavation plan.

Kerr McGee failed to meet a condition for exemption from RCRA § 3005 by failing to store hazardous waste in compliance with 40 C.F.R. § 265.440(c) as incorporated by 40 C.F.R. § 262.34(a)(iii). 40 C.F.R. § 265.440(c) requires that the owner or operator maintain and comply with a contingency plan that describes how the owner or operator will respond to the discharge of infrequent and incidental drippage in the storage yards. Therefore, Kerr McGee is illegally storing hazardous waste.

Exit Meeting

The inspectors conducted the exit meeting at 5:30 p.m. Most of the violations noted in this report were discussed.

10) Signed

Mindy M. Gardner — Date: 8/25/99

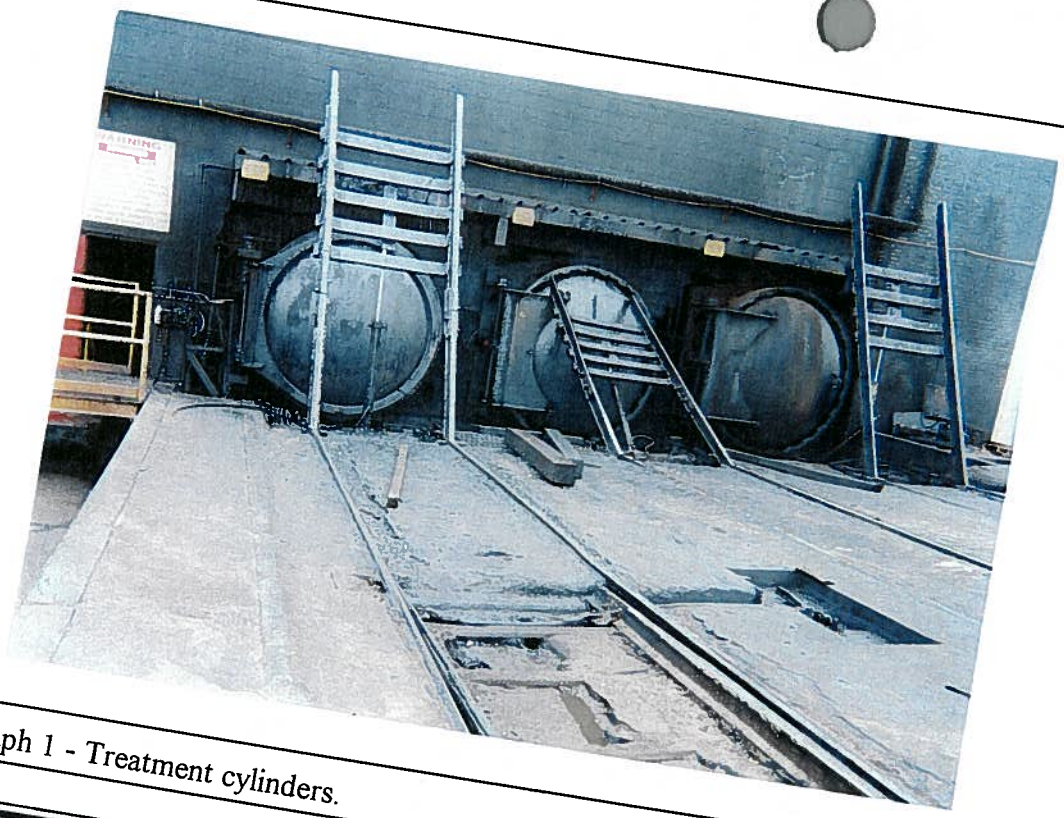
11) Concurrence/Approval

Jeffrey T. Pallas, Chief — Date: 8/25/99
South RCRA Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

Attachments:

A. Photographs
B. RCRA Facility Investigation Phase II Report
C. Facility Map and Process Flow Diagram

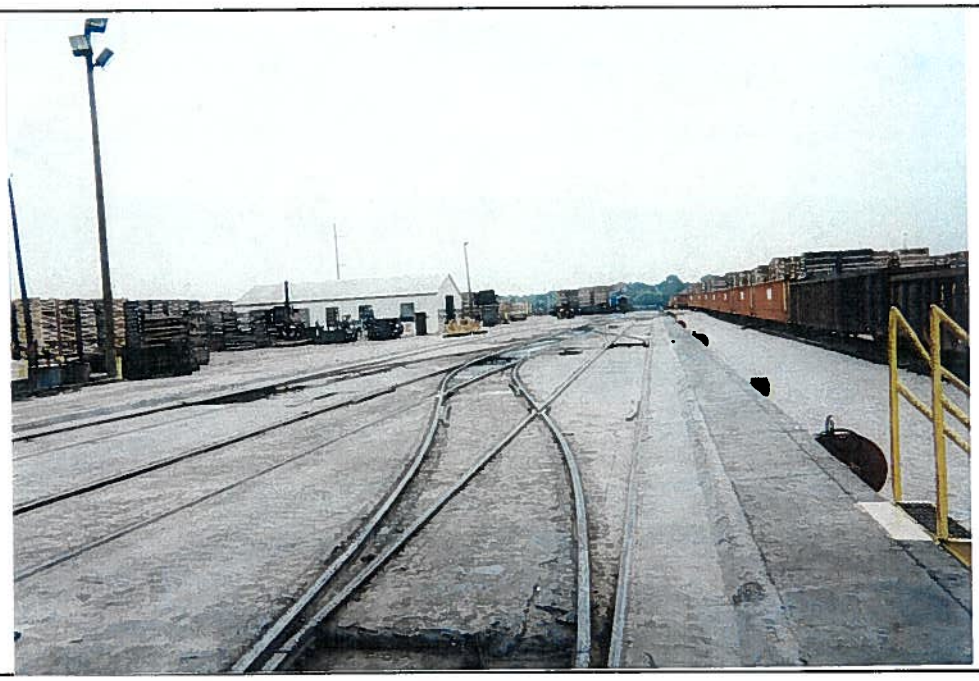
ATTACHMENT A -
PHOTOGRAPHS



Photograph 1 - Treatment cylinders.

Photograph 2 - Container Storage Area.

Photograph 3 - Drip Pad.



Photograph 4 - Drip Pad.

ATTACHMENT B -
RCRA FACILITY INVESTIGATION PHASE II REPORT

RCRA FACILITY INVESTIGATION PHASE II REPORT
KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION
COLUMBUS, MISSISSIPPI

Prepared By

Kerr-McGee Corporation
Safety & Environmental Affairs Division
Thomas W. Reed

October, 1998

TABLE OF CONTENTS

APPENDICES

A. Drainage Ditch Sediment Sampling Analytical Data
B. Soil Investigation Boring Logs
C. Groundwater Investigation Soil Boring Logs
D. Groundwater Investigation Monitor Well Construction Diagrams
E. Groundwater Investigation Laboratory Analytical Data

ATTACHMENTS

I. RFI Correspondence
II. Industrial Hygiene Data Presentation

ILLUSTRATIONS

TABLES

LIST OF FIGURES

FIGURES

EXECUTIVE SUMMARY

Kerr-McGee Chemical Corporation LLC, Forest Products Division (KMCLLC-FPD) owns and operates a wood preserving facility in Columbus, Lowndes County, Mississippi. KMCLLC-FPD purchased the facility in 1964 from Moss American Corporation. The site occupies approximately 90 acres. The facility manufactures pressure treated railroad products including wooden crossties, switch ties, and timbers.

As part of its operations, the facility generated hazardous waste which now is regulated under the Resource Conservation and Recovery Act (RCRA). On August 1, 1995, a Hazardous and Solid Waste Amendments (HSWA) permit was issued by Region IV of the U.S. Environmental Protection Agency (USEPA), governing the solid waste management units. The HSWA permit specifies that KMCLLC-FPD perform a RCRA Facility Investigation (RFI) to address 15 Solid Waste Management Units grouped into eight Solid Waste Management Areas (SWMAs) which were outlined in the RFI Workplan, submitted November 28, 1995.

A Phase I RFI investigation based on the final approved Workplan was performed and completed in November, 1996. The Phase I report was submitted to the MDEQ and received final approval on August 28, 1997. Following discussions with the USEPA and MDEQ, a Phase II Workplan was submitted on December 30, 1997. This workplan included completion of the offsite ditch sediment investigation, additional shallow soil investigation at the southwest boundary of the facility, and further groundwater impact assessment in the northeast and southeast portions of the plant site. The workplan also specified the submittal of documentation for drip pad sump integrity testing and industrial hygiene data relating to employee exposure risks.

The results of the drainage ditch sediment sampling program indicate a significant and consistent decline in semivolatile concentrations downgradient from the facility. Based on these results and discussions with regulatory personnel, no further assessment or corrective action is warranted. The shallow soil investigation successfully delineated the extent of visual soil contamination along the southwest portion of the facility boundary. Again, KMCLLC believes that no further assessment of the shallow soil impact is necessary.

The groundwater impact assessment involved the installation and sampling of three groundwater monitoring wells in the northeastern and southeastern portions of the KMCLLC facility. Initial sampling analyses indicate very low concentrations of semivolatile constituents in one of the wells and no significant concentrations in the other two wells. These wells are representative of clean portions of the alluvial aquifer at or near the boundary of the contaminant plume. The wells will be added to the existing facility semiannual groundwater sampling program, and will be monitored for several sampling episodes to determine if additional offset wells are warranted.

RCRA FACILITY INVESTIGATION PHASE II REPORT
KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION
COLUMBUS, MISSISSIPPI

1.0 INTRODUCTION

Kerr-McGee Chemical LLC, Forest Products Division (KMCLLC-FPD) owns and operates a wood preserving facility in Columbus, Lowndes County, Mississippi. The facility has been in operation since 1928. KMCLLC-FPD purchased the facility in 1964 from Moss American Corporation. The site occupies approximately 90 acres. The facility manufactures pressure treated railroad products including wooden crossties, switch ties and timbers. A site location map is included as Figure 1.

1.1 RFI BACKGROUND

The facility previously maintained a hazardous-waste surface impoundment as part of the wastewater treatment system. The impoundment was used to settle out solids and preservatives from the process wastewater before final discharge of water to the city Publicly Owned Treatment Works (POTW). Preservatives were recovered from the impoundment and returned to the production process for reuse. The impoundment was closed in the summer of 1986, in accordance with the closure plan approved by the Mississippi Department of Environmental Quality (MDEQ), formerly the Mississippi Bureau of Pollution Control.

As provided by item E of the March 13, 1989 Consent Order No. 1636-89 between the KMCLLC-FPD and the MDEQ, the revised Post-Closure Permit Application, Part B (KMCC, 1990) was submitted on April 12, 1990 in compliance with the Resource Conservation and Recovery Act (RCRA). It included a proposal for the recovery of creosote product from the subsurface at the facility. As a result of the submittal and approval of the permit application, Hazardous Waste Permit No. HW-90-329-1 (RCRA Permit) was issued September 11, 1990.

KMCLLC-FPD negotiated the Hazardous and Solid Waste Amendments (HSWA) portion of the permit with the U.S. Environmental Protection Agency (USEPA). In conjunction with the issuance of the HSWA permit, MDEQ requested a permit modification to incorporate the interim corrective action measures. Both the HSWA permit and the permit modification were subject to a public comment period. Neither permit received any public comments and both were finalized in August 1995. Hazardous Waste Permit No. HW-90-329-1 with the MDEQ was thereby modified effective August 1, 1995 and is effective until August 1, 2005.

As part of its past operations, the facility generated hazardous waste which now is regulated under RCRA. Former releases from the production process area impacted local groundwater quality. The HSWA permit governs the Solid Waste Management Units (SWMUs) and specifies that KMCLLC-FPD perform a RCRA Facility Investigation (RFI) to address 15 SWMUs grouped into 8 Solid Waste Management Areas (SWMAs).

The RFI Workplan submitted on November 28, 1995 (Grant, 1995), describes the investigative process to be followed for the RFI and describes the technical and administrative procedures which were used during the RFI. The primary objectives of the RFI are to characterize the nature and extent of releases of hazardous waste, including hazardous constituents and affected media, from specific SWMUs and their actual or potential receptors.

The MDEQ commented on this RFI Workplan in a December 4, 1995 letter to KMCLLC-FPD. KMCLLC-FPD addressed the MDEQ comments in a February 2, 1996 letter to MDEQ and USEPA. In the letter, KMCLLC-FPD provided confirmatory sampling data for SWMAs II and III, and proposed additional RFI sampling at SWMAs IV, V, VII, and VIII. The USEPA granted conditional approval for the RFI Workplan in an April 24, 1996 letter. The approval was contingent upon KMCLLC-FPD's submittal of a revised workplan incorporating KMCLLC-FPD's February responses and two additional USEPA comments. KMCLLC-FPD revised this document accordingly on May 24, 1996.

KMCLLC-FPD received the approval letter for the RFI Workplan on June 6, 1996. The Phase I investigation was completed on November 25 and the RFI report was submitted to the MDEQ on March 31, 1997. The MDEQ commented on the Phase I RFI Report in a letter dated July 14, 1997. Following discussions with KMCLLC-FPD and MDEQ personnel, KMCLLC-FPD

submitted a series of revisions and responses based on the July 14 MDEQ correspondence. These revisions to the Phase I RFI report were accepted by the MDEQ by letter dated August 28, 1997. In this correspondence, the MDEQ formerly requested the preparation by KMCLLC-FPD of a Phase II RFI Workplan for the Columbus facility.

The Phase II RFI Workplan was completed and submitted to the MDEQ on December 30, 1997. Earlier in October 1997, KMCLLC proposed an initial sediment sampling program for the offsite stormwater drainage ditches at the facility to serve as a baseline for the main sampling program presented in the Phase II Workplan. This sampling was completed in October 1997 and reported in the Workplan. The USEPA and MDEQ conducted a joint review of the Phase II Workplan and responded by letter to KMCLLC with a Notice of Technical Inadequacy on March 27, 1998. This notice included descriptions of additional work to be performed as part of the Phase II program. Following additional discussions with the USEPA and MDEQ, a final resolution of the Phase II activities was determined at a site meeting on July 22, 1998. Specific correspondence relating to the RFI discussions is contained in Attachment I.

2.0 DESCRIPTION OF CURRENT CONDITIONS

2.1 HYDROGEOLOGIC CHARACTERIZATION

Underlying the entire plant site are Quaternary age alluvial deposits consisting of gravel, sand, silt and clay. Generally, the gravel occurs at the base of the alluvium and grades upward into sands and silts. Well records indicate the thickness of the alluvium to be about 25 feet in the area of the Kerr-McGee facility.

The Eutaw formation underlies the alluvial deposits. The Eutaw is typically composed of two members, the uppermost being the Tombigbee Sand Member and the lower member remaining yet unnamed but commonly referred to as "typical" Eutaw. The Tombigbee Sand Member is a fine-to-medium grained, glauconitic, calcareous, massive sand. The lower "typical" Eutaw is less glauconitic sand with a slightly coarser texture than the overlying Tombigbee. Clay layers with associated lignite and plant fossils can be found in the "typical" Eutaw. Cross-bedding is common. The Eutaw formation, on a regional basis, is up to 500 feet thick and at an approximate depth of 200 feet and greater, has served as a major aquifer and source of industrial and domestic water. In the area of the Columbus facility, the Eutaw is composed of finer grained material and appears to be less permeable.

2.1.1 Aquifers

Two distinct groundwater aquifers underlie the plant site and are significantly involved in the environmental study of the facility. These are the upper most alluvial aquifer and the Eutaw aquifer. The upper most alluvial aquifer, underlain by the Eutaw formation, represents the first susceptible zone to be impacted by any potential contamination. The alluvial material was deposited by Luxapallila Creek and consists of interbedded layers of clay, silt, sand and gravel that are generally coarser with depth. Hydraulic conductivity of some sections of the alluvium is reported (Wasson et al, 1965) as being anywhere from 200 to 2000 gpd/ft^2 . The saturated zone is generally about 20 feet thick and is subject to seasonal fluctuations. Luxapallila Creek cuts the entire thickness of the alluvium and tends to recharge or drain the alluvial aquifer,

depending on the season and flow stage of the creek. Recharge to the alluvium also occurs as rainwater percolating through the overlying material.

The Upper Cretaceous Eutaw aquifer is an important source of both industrial and domestic water supplies on a regional basis. The Eutaw crops out in the Columbus area, representing recharge points of the aquifer system (Wasson et al, 1965). During the dry summer months, when the water table is low, the formation receives some recharge from Luxapallila Creek.

2.1.2 Eutaw Structure

The contact between the upper alluvial sands and gravels and the underlying Eutaw formation is an erosional surface. Blue-green, glauconitic, micaceous, fine grain sands and silts identify the top surface of the Eutaw unconformity. A weathered zone of orange, medium to coarse grained glauconitic sand sometimes occurs on the surface of this zone. The weathered zone is not consistently present beneath the facility. The low permeability Eutaw formation retards downward migration of product. The subsurface structure is mapped as the aquitard for the shallow alluvial formation.

The depth of the Eutaw is approximately 25 feet below ground surface. Locally, the formation is dipping in a southwesterly direction. Paleostructures of the channels are evident as north-to-south trending areas on the surface of the unconformity.

2.2 SURFACE WATER CHARACTERIZATION

Luxapallila Creek, located one mile east of the facility, and the drainage areas that cross the site have been identified as local groundwater discharge areas. Stormwater monitoring is reported annually for the NPDES Permit MSR20010. Stormwater samples, analyzed in accordance with the NPDES permit, indicate that surface water discharge is not impacted by site operations or historical contaminants.

2.3 MONITORING AND DETECTION OF CONTAMINATION

The facility has undergone extensive field investigations to delineate groundwater contamination associated with the historical releases caused by past practices at the production process area and the Solid Waste Management Units (SWMUs). The contaminant plume extent has been delineated by a total of 83 groundwater monitoring wells/piezometers, in addition to 63 soil borings located both onsite and offsite of the facility.

KMCLLC-FPD initiated a groundwater monitoring system at the facility in July 1981 in compliance with RCRA groundwater monitoring requirements as specified in Subpart F of 40 CFR 265.91. As of August 1, 1998 a total of forty-eight (48) alluvial monitoring wells, twenty-six (26) alluvial piezometers, eight (8) Eutaw formation monitoring wells, and one Eutaw formation piezometer have provided hydrogeologic data and have been utilized to monitor the extent of groundwater contamination.

2.4 NATURE AND EXTENT OF CONTAMINATION

Past soil investigations and groundwater monitoring documented two separate constituent sources. Two product plumes have been identified and constitute the groundwater plume. The two product sources are the production process area and the loading and unloading areas near the black tie storage area.

The plumes are composed of both free creosote product and dissolved constituents. The free product contaminants in the production process area occur primarily in the erosional depressions of the Eutaw surface. Groundwater recovery wells and collection trenches have been placed in these erosional depressions to maximize free product recovery. KMCLLC-FPD has demonstrated that the plume presently is under the influence of the groundwater recovery trenches.

A plume of free product has also been delineated on-site at the eastern half of the facility and is associated with railcar loading and unloading in the black tie storage area.

2.5 IMPLEMENTATION OF INTERIM CORRECTIVE MEASURES

KMCLLC-FPD has performed source removal efforts for impacted soils at the drip pad, work tanks, and in the black tie storage area. In addition, KMCLLC-FPD has implemented voluntary corrective action recovery methods for the collection of creosote product and dissolved constituents from groundwater. Containment trenches serve as hydraulic barriers for capture of dissolved constituents and free product. A total of 12 alluvial recovery wells operate currently for product recovery, and 26 alluvial piezometers monitor recovery well and trench efficiency.

2.5.1 Source Removal of Soil

Source removal measures to the drip track, tank farm area and the impoundment areas have minimized, and in some cases eliminated the potential for on-going releases to the soil and groundwater environment from historical and present operational practices.

In 1988, KMCLLC-FPD excavated the existing tank farm area and the closed impoundment to a visually clean criterion, removing over 485 tons of impacted soil. KMCLLC-FPD back-filled this area with clean soil and constructed a concrete secondary containment around the tank farm to ensure releases to the environment would not occur. Pipes associated with the production process were brought above ground and a concrete floor was installed in the tank farm area.

A drip pad meeting the requirements of 40 CFR 265 Subpart W was constructed in 1988. The drip pad was constructed after four feet of visually impacted soil was removed and disposed of at a RCRA landfill. In addition, the former underground car unloading station, located in the black tie storage area, underwent significant soil excavation and removal. Approximately 70 tons of impacted soil were removed from this area in early 1990.

3.0 PHASE II RFI INVESTIGATION

The activities proposed for the Phase II RFI investigation at the Columbus facility were presented in the KMCLLC-FPD July 30, 1997 correspondence to the MDEQ and modified in later discussions with the MDEQ and USEPA. Specifically, these items include documentation of a containment system inspection program report, the results of the drainage ditch sediment sampling program, a surficial soil impact study along the southwest boundary of the facility, a groundwater impact study on the east and northeast portions of the groundwater contaminant plume, and submittal of the industrial hygiene data relating to employee exposure risks in the black tie storage area.

3.1 CONTAINMENT SYSTEM INSPECTION PROGRAM REPORT

3.1.1 Sump Integrity Testing

KMCC-FPD conducted the sump integrity test on the drip pad sump to eliminate any concerns of the agencies; however, KMCLLC wishes to document that according to the EPA Guidance Document 305-B-96-001: Wood Preserving Resource Conservation and Recovery Act Compliance Guide, the following interpretation ,as documented in Section 4-3,would apply to this sump:

" Many tanks or sumps that are used to accumulate or treat wastewater from wood preserving may, in fact, be excluded from RCRA regulation. Wastewater treatment units subject to regulation under the Clean Water Act are exempt from RCRA standards. As a result, tanks and sumps used to collect wastewaters may not be subject to any standards."

KMCLLC utilized the post-Christmas vacation period when operations were at a minimum for the holiday. Since the test required 72 hours of isolation, the post-holiday period was considered to be an ideal time to conduct this test. Therefore, KMCLLC conducted the sump integrity test at the facility on the 6th through the 9th of January, 1998.

KMCLLC utilized the EPA Technical Guidance Document (EPA/530-R-93-005): Determining the Integrity of Concrete Sumps to assess the structural integrity of the dip pad sump. This

publication specifically was written to outline the mechanisms necessary for the assessment of the structural integrity of a hazardous waste sump that is made of concrete. This publication discussed mechanisms of concrete failure to provide a basis for conducting investigations, including methods for concrete inspection and sump leak testing. KMCLLC selected the recommended static head testing method as described in the text.

The sump integrity investigation was conducted in the following manner in compliance with the aforementioned sump integrity testing guidance:

3.1.2 The Basic Investigation

The basic investigation involved the following steps:

- Planning the investigation
- Reviewing the engineering data
- Preparing the sump for inspection
- Performing the inspection, and
- Conducting a sump tightness test

The basic investigation was designed to provide the owner, KMCLLC-FPD with sufficient information to determine the integrity of the sump and determine if further testing was needed.

Planning the Investigation

The overall purpose of the investigation was to determine whether the sump was leaking and consequently, releasing hazardous waste to the environment. KMCLLC-FPD reviewed the design plans, properly cleaned and inspected the sump, and conducted a static head leak test on the sump.

Review of the existing Data

All existing information such as design drawings, as built drawings, operation and maintenance records were reviewed.

Preparing the Sump for Inspection

KMCLLC-FPD steam cleaned the sump for inspection and prior to implementation of the Static Head Leak test.

Performing the Inspection

After the sump was steam cleaned, a visual inspection was performed with the following elements assessed and documented:

- The alignment of concrete elements was checked, such as irregular foundation settlement. No settling was observed.
- All exposed concrete surfaces were visually examined for evidence of deterioration. No deterioration was observed.
- All cracks were investigated. No cracks were observed.
- Surfaces were inspected for evidence of chemical attack. No chemical attack or chemical incompatibility was observed.
- Pipe penetrations were checked closely for leaking. No leakage was observed.
- Joints were examined. All joints were structurally sound and sealed.

Sump Tightness Test

Static Head Test

The static head test is a volumetric leak test whereby the sump is filled with water and checked for changes in volume by measuring the drop in water level over time. This method can be applied to most enterable sumps. This method works best with smaller sumps, of which the drip pad sump would be classified as.

The following steps present the recommended approach for conducting the static head test. Steps 1 through 5 address test setup and equilibration. The remaining steps address the actual test period.

1. The sump was isolated to prevent any liquids from entering or leaving during the test period. A steel rule was used as a depth gauge was attached to the side of the sump to monitor the water level elevation throughout the test period.

2. The sump was then filled with water, the water level was recorded from the depth gauge, the dimensions were measured, and a calculated surface area was recorded.

3. All openings were covered.

4. A small chamber was used as a stilling well and calibration chamber. The chamber was placed at a location in the sump that provided the most accurate measurement of a drop in water level.

5. In the guidance document pertaining to small sumps, the depth gauge may be adequate to determine if the sump is leaking. The EPA Guidance Document recommends that the sump be isolated and filled with water to a given level as measured by the depth gauge. The depth gauge was measured three times for an average initial reading. The initial readings were: 7.89 feet, 7.90 feet, and 7.89 feet. for an average of 7.89 feet. These measurements were taken with a water level indicator Model 51453.

6). The sump leak test was performed for a period of 72 hours as per the EPA Guidance Document. The final water level readings were: 7.89 feet, 7.88 feet, 7.89 feet. for an average of 7.89 feet. The leak rate was calculated using the following formula:

For a Rectangular Sump or Square Sump

Leak Rate (gals/hour) = (d2-d1) * L * W * CF

where d2 = final depth in inches of the depth gauge
d1= Initial depth in inches of the depth gauge
L = Length (inside) of sump in feet
W = Width (inside) of sump in feet
** CF = 0.0086 if (d2 - d1) is in inches

** This conversion factor is calculated for a 72 hour period.

From this formula, a leak rate can be predicted for the drip pad sump.

Leak rate (gallons/hour) = (d2 - d1) * L * W * CF

Where d2 = 7.89 feet * 12 inches/ 1 foot = 94.68 inches

d1 = 7.89 feet * 12 inches/ 1 foot = 94.68 inches

With d1 - d2 = 0, therefore regardless of dimensions, there would be a leakage rate of zero.

3.1.3 Preparing a Report

The investigation was concluded. No structural problems were observed and the conclusion was that the sump was not leaking based on the 72 hour static head test showing a leakage rate of zero.

3.2 DRAINAGE DITCH SEDIMENT SAMPLING PROGRAM

The stormwater drainage ditches on and off-site are SWMA VIIII. On July 22, 1998, KMCLLC met with the USEPA and MDEQ on-site to discuss the drainage ditch assessment and the characterization. The following text is a summary of those discussions.

The purpose of the drainage ditch sediment sampling program was to fully characterize the onsite and offsite extent of Polynuclear Aromatic Hydrocarbons (PAH's) that might be related to historical creosote contamination from the KMCLLC facility. As KMCLLC has demonstrated in the stormwater sampling program, the current process does not represent an ongoing threat for release of any PAH's to the stormwater flow off-site. KMCLLC has demonstrated source control by the sampling of the surface water discharge being non-detect for PAH's and by production process modifications that collect and isolate any precipitation that could come in contact with PAH's on-site, (ie, secondary containment and the drip pad). Therefore, any investigation off-site would focus on the determination of any residual creosote PAH's from an historical nature.

Any characterization of contamination must start with the understanding of the chemical of concern. The PAH's in creosote are semivolatile in nature and composed of 4 to 6 ring carbon chains. PAH's are ubiquitous throughout the environment occurring both naturally in coal, fire, and volcanoes, and man-made, appearing in automobile exhaust, asphalt roads, smoke, and

coking by-products (creosote). Typically, they exhibit a very low solubility in water and adsorb readily to soils. They exhibit a low mobility in soils and limited leachability from the soil regime. The rich supply of carbon leads to rapid biodegradation of the lighter chained molecules.

The sampling in the off-site ditches did detect low levels of PAH's. However, a visual inspection of the ditches revealed numerous potential sources, both domestic and residential of PAH's. Open dumping of petroleum products along with old tires and assorted debris was noted at several locations during the visual inspection. Based on the inspection of the off-site ditches the usage of the ditches is not regulated. The surface water flow is intermittent and certainly a non-potable water source. Degradation of products would progress at a normal rate or slightly accelerated due to the aerobic activity. A healthy population of minnows was noted throughout the area of inspection off-site.

3.2.1 Data Discussion

The initial onsite ditch sediment sampling was performed in June and August 1996 and reported in the KMCLLC's RCRA Facility Investigation Report (KMCLLC 1997b). Offsite drainage ditch sediment sampling was conducted in two phases, once in October 1997 and again in March 1998. Prior to this sampling, the drainage ditches were walked out and traced from their exit points at the facility all the way downstream to Luxapallila Creek. Figure 2 displays the drainage ditches from the facility to the creek. The RFI Phase I onsite ditch sediment sampling locations are also shown on Figure 2. Outfalls 002, 005, and 003 all combine to flow offsite at the northeastern corner of the facility. Outfall 004 leaves the facility on the eastern boundary and commingles with 003 coming down from the north. Outfall 001 flows south then southeast, and eventually east to tie into the other drainage ditch to form one drainage system which flows ultimately to Luxapallila Creek.

The October 1997 sediment sampling locations and total semivolatiles results are shown on Figure 2, as well as the locations and results of the March 1998 sampling. Background samples were collected from two upgradient ditch locations during the March 1998 sampling. All sediment samples were collected, bottled, and preserved according to the approved facility Sampling and Analysis Plan (SAP) followed during the Phase I RFI investigation. The sediment samples were shipped overnight to Southwest Laboratory of Oklahoma, Inc. for analysis of K001 creosote constituents and TCLP creosote constituents. A listing of the creosote

constituents is presented in Table 1. Appendix A contains the laboratory analytical data and sediment sampling records. Methods utilized for the management and use of the collected data followed the Data Management Plan (DMP) prepared for the Phase I investigation.

Table 2 compares the ditch sediment sample analytical results for total semivolatiles from onsite locations (upgradient) to offsite locations (downgradient). This comparison shows the rapid degradation and decline of semivolatile concentrations in the ditch sediment downgradient from the facility. The slight increase in semivolatiles from location 001-02 to 001-03 is indicative of multiple source contributions to the ditches, (i.e., an asphalt road adjacent to the outfall). This is evidenced by the concentration of semivolatile constituents at background sample location BKG-02, and by the presence of other manufacturing and wood processing facilities adjacent to these ditches and downgradient from the KMCLLC site.

In summary, semi-volatile PAH constituents were noted on-site in the sediment of the drainage ditches. KMCLLC has source control measures in place, therefore, the presence of these constituents in the on-site areas is related to past historical practices. Because of the source controls on-site, there is no on-going source and biodegradation of these existing constituents will continue to occur. The existing contamination appears to be heavily sorbed to the sediment based on the TCLP data from several samples indicating zero or minimal leaching.

The off-site investigation did detect the presence of low levels of PAH's in the drainage ditch sediments at some locations. The investigation also revealed a background sample with low levels of PAH's. The concentrations were lower by an order of magnitude or more in comparison with the on-site samples, indicating no ongoing source and the degradation process was occurring. A visual inspection of the ditches revealed numerous potential sources of PAH's as well as open dumping of liquid petroleum products, tires, and considerable amounts of other debris.

In light of the complicated nature of determining the source of the PAH's off-site and the lack of controls to mitigate any further impact from other sources, KMCLLC is advocating the use of natural attenuation as the choice for remediation of the PAH's at this location. KMCLLC believes that sources of potential sediment are controlled on-site and that natural attenuation

will allow the sediments to recover naturally at an acceptable rate of time. KMCLLC believes that natural attenuation will reduce any potential risks by three processes:

1. Conversion to a less toxic form through destructive processes such as biodegradation or abiotic transformation,
2. Potential exposure levels will be reduced by lowering concentration levels through destructive processes (Krebs Cycle); and
3. PAH mobility and bioavailability is reduced by high sorption tendencies to the soil/sediment matrix.

In summary, KMCLLC believes natural attenuation will remedy any residual PAH's that might have originated from an historical source.

3.3 SURFICIAL SOIL IMPACT STUDY

In order to determine the extent of creosote impact to the surficial soils beneath the Columbus facility, a review was conducted and a compilation made of all soil boring, piezometer, recovery and monitor well lithologic information. The surficial soil represents the unsaturated zone of sediment between the layer of surface gravels and cinders and the water table. As part of the facility's routine operations and maintenance, a surface gravel layer cap covers the facility and is reconditioned on a periodic basis. This gravel cover represents the working surface of the site. This layer ranges from one to three feet thick over most of the facility.

The determination of surficial soil creosote impact was based on utilizing the most common and reliable indicator, namely visual inspection of the drill cuttings and split-spoon cores and the utilization of analytical data. Determinations based on odor are unreliable, and very few of the historic soil boring intervals were evaluated for creosote constituents by laboratory analytical methods.

A surficial soil impact study was presented in the Phase II Workplan. This study detailed the impacted soils within the facility boundaries but did not extend far enough to encompass potential impact beyond the southwest boundary of the facility processing area.

Based on discussions with the MDEQ and EPA, additional surficial soil characterization was included in the Phase II Investigation to assess the area southwest of the facility. This area consists of a wooded field along the farthest south portion of the west facility fence. The remainder of the west fence from the wooded field north is immediately bounded by a north-south residential asphalt street with underground utilities. This area is in a more upgradient position to the facility and access for drilling was not initiated.

The field assessment included the drilling of a minimum of four shallow soil borings utilizing hand auger methods. Borings were drilled to a depth sufficient to encounter the water table, and the surficial soils were visually inspected for potential creosote staining and/or odor. These locations are shown on Figure 3. A total of seven soil borings were drilled in the area (B-57 to B-63). The water table was encountered in all seven borings. Creosote stain and odor was noted in the two borings closest to the facility (B-60, B-63). Figure 4 is a cross-section first presented in the Phase II Workplan and modified to include soil borings B-59 and B-60. This cross-section details the limited extent of shallow creosote impact in the surficial soils.

The boring closest to the north-south asphalt road, B-58, was free of any creosote impact, indicating minimal creosote impact to the shallow soils in an upgradient direction beneath the west boundary road. Appendix B contains the shallow soil boring lithology logs.

3.4 GROUNDWATER IMPACT STUDY

The joint review of the Phase I RFI Report by the EPA and MDEQ addressed concerns relating to the extent of the dissolved constituent groundwater plume in the southeast and northeast portions of the facility. Both monitor well CMW-24 on the southeast plume boundary and CMW-27 on the northeast plume boundary have recently displayed dissolved constituent impact and no longer define the non-detect boundary of the plume. KMCLLC agreed to install additional groundwater monitor wells in these areas to re-establish the "clean line" for the plume. The locations of these wells are shown on Figure 5.

Two wells, CMW-28 and CMW-29, were drilled and installed approximately 200 feet east and 200 feet north, respectively, from CMW-27. Well CMW-30 was installed along the southeast facility boundary approximately 300 feet southwest of well CMW-24. Each well was drilled to

total depth into the top of the Eutaw Formation. The wells were constructed with 304 Stainless Steel screen and blank casing below the water table and Schedule 80 PVC casing above the water table. Soil boring lithology and well construction details are contained in Appendices C and D respectively.

Groundwater samples were collected for laboratory analysis from all three wells. The samples were collected on July 28, 1998 and analyzed for acid and base/neutral semivolatiles and BTEX. The results of the analyses, contained in Appendix E, indicate very low "J" value concentrations of fluoranthene (4 ppb) and naphthalene (8 ppb) in CMW-29. Wells CMW-29 and CMW-30 contained J values of 2 ppb and 5 ppb respectively for phenol, however, phenol was also detected as a laboratory contaminant. Well CMW-28 did not display detectable concentrations of semivolatile or volatile constituents.

3.5 INDUSTRIAL HYGIENE DATA PRESENTATION

Industrial hygiene data on creosote constituent exposure to facility personnel was collected in compliance with worker exposure monitoring protocols under the auspices of OSHA. This information is provided in attachment II.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The drainage ditch sediment sampling program, surficial soil impact study, and groundwater impact study represented the field investigation portions of the Phase II RFI program. The specific conclusions and recommendations based on these activities are as follows.

Results of the drainage ditch sediment sampling program indicate a significant and consistent decline in total semivolatile concentrations downgradient from the facility. This decline does not hold true in areas where background concentrations of semivolatile constituents from other sources enter the drainage ditch system. KMCLLC met with representatives from the USEPA and MDEQ on July 22, 1998 at the Columbus FPD site to discuss the sediment sampling findings and to inspect the offsite ditches. Based on the sampling results and the ditch

inspections, it was mutually agreed that no further assessment or corrective action of the offsite ditches is necessary. KMCLLC will continue source control maintenance onsite.

The surficial soil impact study was conducted in the area along the southwest portion of the facility boundary. The shallow soil sampling successfully delineated a visually clean line along that segment of the facility boundary. KMCLLC believes that the shallow soil investigation at the facility is complete and that further investigation is not warranted.

Groundwater monitor wells CMW28, CMW29, and CMW30 were installed in the northeastern and southeastern portion of the facility as part of the groundwater impact study. Initial sampling of the wells indicated very low concentrations of certain semivolatile constituents in CMW29, and no significant concentrations in wells CMW28 and CMW30. These wells are representative of clean portions of the alluvial groundwater system at or near the boundary of the contaminant plume, and as such, will be added to the existing semiannual groundwater sampling program. The need for additional step-out wells will be based on the generation of analytical data from several sampling episodes. These data will be reviewed periodically for increases in semivolatile constituent concentrations, and if warranted, KMCLLC will propose additional step-out well locations.

5.0 REFERENCES

Grant, KMCC , 1995, RFI Work plan, Columbus, Mississippi

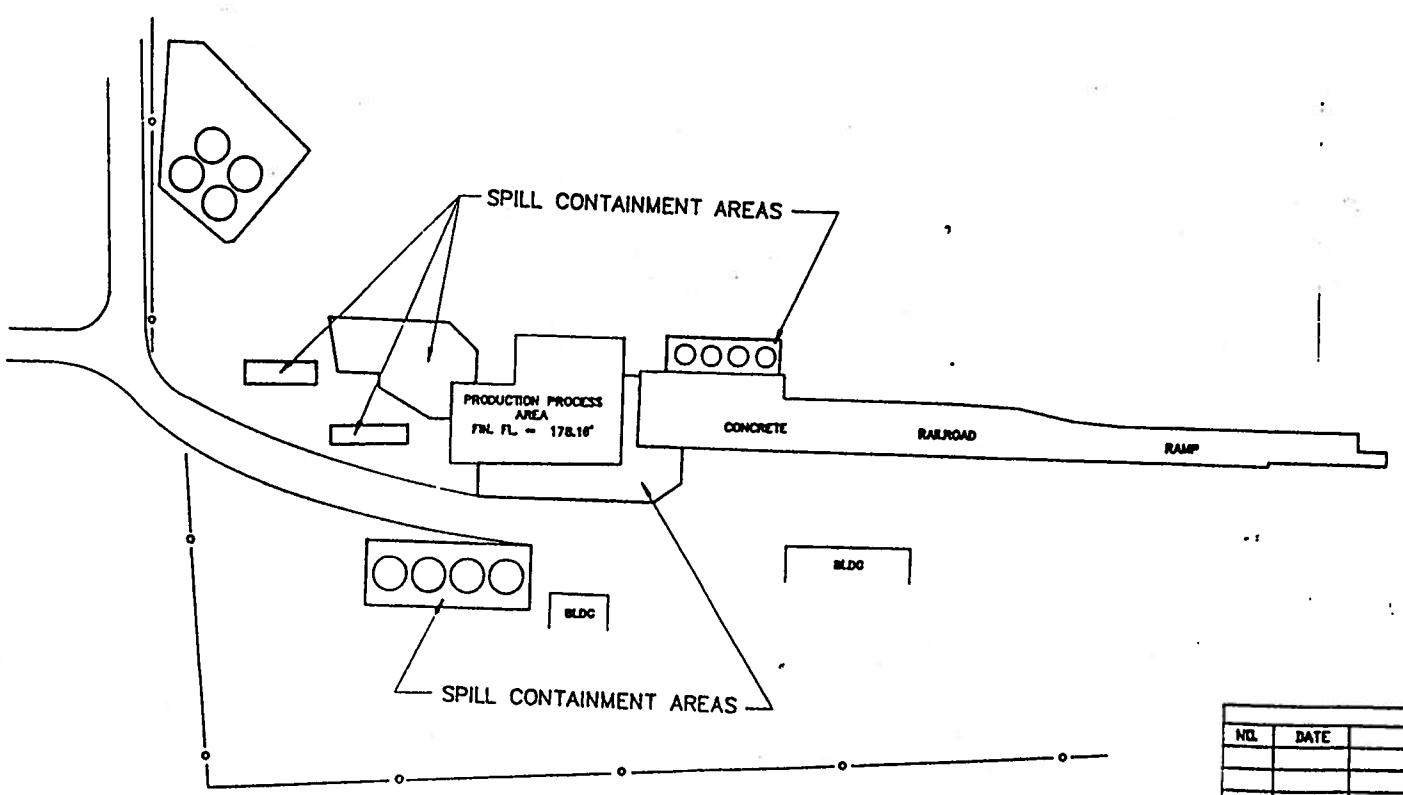
Kerr-McGee Chemical Corporation, 1990, Post-Closure Permit Application, Part B, Volume I, Columbus, Mississippi

Kerr-McGee Chemical LLC, 1997a, Phase II Workplan for RCRA Facility Investigation

Kerr-McGee Chemical LLC, 1997b, RCRA Facility Investigation Report

Wasson, B.E., Golden, H.G., M.W., 1965, Water for industry development in Clay, Lowndes, Monroe and Oktibbeha Counties, Mississippi, Water Resources Division, USGS

ATTACHMENT C -
FACILITY MAP and
PROCESS FLOW DIAGRAM



REVISIONS		
NO.	DATE	DESCRIPTION

SURVEY OF

TOPOGRAPHIC SURV
SPILL CONTAINMENT
KERR–McGEE CHEMIC

DRAWN BY: DW
CHECKED BY:
JOB NO.
DRAWING NO. 93 – 001
DATE: 1/
SCALE: 1"

Engineering Plus
Planning‡Surveying‡Testing‡Landscape Architecture
105 N. 5th. St. Columbus, Mississippi 39701 (601) 327-4230

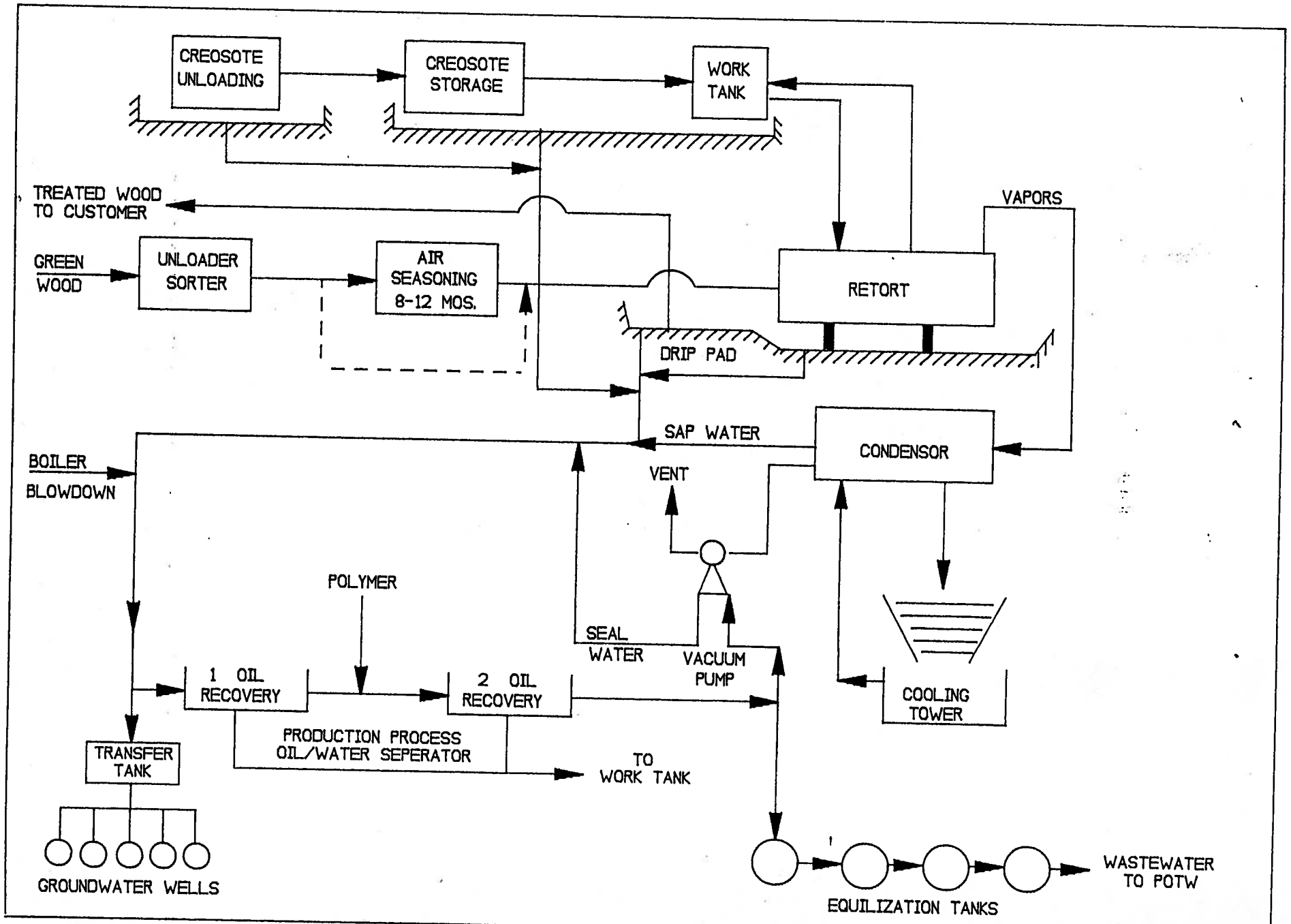


FIGURE 2-3: WOOD TREATING PROCESS FLOW SCHEMATIC, COLUMBUS, MS

RCRA Inspection Report

1) Inspector and Author of Report

Mindy M. Gardner
Environmental Engineer

2) Facility Information

Kerr McGee Chemical Corporation
2300 14th Avenue
Columbus, Mississippi 39701
MSD 990 866 329

3) Responsible Officials

Ronald Murphy	Kerr McGee Chemical Corporation (Kerr McGee) -
Chuck Swann	Kerr McGee

4) Inspection Participants

Mindy M. Gardner	United States Environmental Protection Agency (EPA)
Kirk Shelton	Mississippi Department of Environmental Quality (MDEQ)
Ronald Murphy	Kerr McGee
Chuck Swann	Kerr McGee

5) Date and Time of Inspection

June 16, 1999, 8:30 a.m. - 5:30 p.m.

6) Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 260 through 270. The State of Mississippi adopts by reference the regulations in 40 C.F.R. Parts 260 - 270 and a RCRA Permit (HW-90-329-1) and an EPA HSWA Permit, both of which expire August 1, 2005.

7) Purpose of Inspection

To conduct an unannounced EPA oversight compliance evaluation inspection (CEI) and determine Kerr McGee's compliance with the applicable requirements of Mississippi Hazardous Waste Management Regulations.

8) Facility Description

Kerr McGee manufactures pressure treated railroad products including crossties, switch ties, and timbers using creosote. The Facility is approximately 90 acres and there is no fence on the east side of the facility.

The Facility first notified as a large quantity generator (LQG) on August 18, 1980, with subsequent notifications occurring on October 24, 1991, April 1, 1997, and March 4, 1998. The Facility used a surface impoundment to settle out solids and preservatives from process wastewater before final discharge to the city Publicly Owned Treatment Works. On November 19, 1980, the facility submitted a Part A Permit Application. Groundwater monitoring was initiated in July 1981 and the impoundment was closed in 1986 in accordance with an MDEQ approved Closure Plan. A Part B Application was submitted in March 1987 for post closure care of the surface impoundment and again in September 1987 to include the discovery of dissolved creosote constituents in down-gradient monitoring wells. The Part B Application was resubmitted in April 1990 to include a proposal for the recovery of subsurface creosote product from the alluvial aquifer. A new Part A application was submitted on June 14, 1990 indicating that the surface impoundment was closed . A post-closure permit was issued in September 1990. In August 1995 the post-closure permit was modified and submitted for public comment along with the Hazardous and Solid Waste Amendments of 1984 (HSWA) portion of the permit. Both permits were effective on August 1, 1995, and remain in effect until August 1, 2005.

The post-closure permit requires post-closure care of the closed surface impoundment and corrective action to reduce and prevent further migration of contamination in the groundwater. There is no distinction made between groundwater contamination from RCRA regulated units and HSWA Solid Waste Management Units (SWMUs) . There are forty-seven (47) monitoring wells and twenty-five (26) piezometers in the alluvial and Eutaw aquifers to monitor the groundwater plume containing creosote. The corrective action system uses eleven (11) recovery wells and two (2) recovery trenches to capture the creosote in the groundwater. The HSWA portion of the permit requires corrective action at SWMUs 22, 23, 34, 36, 37, and 38 and any newly identified SWMUs. The RCRA Facility Investigation (RFI) began in November 1995 with submittal of the first RFI work plan. The RFI Report was submitted on March 31, 1997, and in October 1998 the Facility submitted the Phase II Report. Please see Attachment B for a copy of the RFI Phase II Report, which further discusses the corrective action going on at this Facility.

9) Findings

Kerr McGee manufactures pressure treated railroad products including crossties, switch ties, and timbers using creosote. The wood comes in green, is allowed to air dry, is inspected for quality, cut to size, and then treated in one of three treatment cylinders (Photograph 1). Some logs will have splits in the ends and will receive a metal end plate. The cut blocks are distributed to the public for use as firewood. After treatment, process wastewater is hard piped to the wastewater treatment plants enclosed oil water separator. Recovered creosote is reused and the water is subsequently treated prior to discharge to a National Pollutant Discharge Elimination System (NPDES) permitted outfall. The drip pad sweepings and material cleaned out of the treatment cylinder containment area are sent off-site as hazardous waste. Saw dust is taken to a landfill or sold.

Entrance Meeting

On June 16, 1999, Mindy M. Gardner, EPA, and Kirk Shelton, MDEQ, arrived at the Kerr McGee facility at approximately 8:30 a.m. The inspectors were immediately received by Ron Murphy, Plant Manager. The inspectors introduced themselves, showed their credentials, and explained that the purpose of the visit was to conduct a RCRA compliance evaluation inspection. The inspection began with a brief overview of the Facility's current operations and the inspectors proceeded to conduct the physical inspection of the Facility operation with the assistance of Mr. Murphy and Chuck Swann, Environmental Coordinator.

Ninety (90) Day Storage Area

On the day of the inspection, there were twenty-four (24) fifty-five (55) gallon drums in the Ninety Day Storage Area (Photograph 2). All of these drums had been stored for less than ninety (90) days and were labeled as "Hazardous Waste" and F034, in good condition and kept closed.

Drip Pad

The drip pad (Photographs 3,4) is approximately 15,000 square feet and shallowly sloped toward the treatment cylinders. This pad was installed in 1988 and certified by a professional engineer in December 1991. There are drains along the pad and in the treatment cylinder steel lined containment area. Collected drippage and wastewater are hard-piped to the NPDES wastewater treatment plant. There are approximately four (4) inch berms on the north and south side of the drip pad, but no berm is present at the end of the drip pad. The entire pad is surrounded by gravel. It was noted that there were cracks in the surface of the berms on the north and south sides of the drip pad. There was

evidence of staining both on the pad and at the end of the pad on the gravel. There was also heavy staining located on the ground near the treatment cylinders on the south end of the pad.

Kerr McGee failed to adhere to a condition for exemption from RCRA § 3005 given in 40 C.F.R. § 265.443(a)(3), as incorporated by 40 C.F.R. § 262.34(a)(iii). This regulation requires that the drip pad have a curb or berm around the perimeter of the pad to prevent releases to the environment. Therefore, Electric Mills is illegally storing wastes in violation of RCRA § 3005.

A section of the drip pad is pressure washed daily and the whole pad is pressure washed and manually cleaned each week.

It was noted during the inspection that two (2) gates along the north fence line were kept open with no security present. The gate located on the west side of the facility was also open, but a security camera monitors this location. A guard service patrols the facility from 5:00 p.m. until 6:00 a.m. and the gates are locked during this time. The surface impoundment was maintained, the fence surrounding it was locked, and signs were placed on each side that noted "Danger."

Kerr McGee was in violation of 40 C.F.R. § 264.14 because the Facility did not prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the Facility.

Records Review

During the inspection, the inspectors reviewed the following records:

- Manifests for 1996 through 1999;
- Financial assurance;
- Job titles and job descriptions;
- Training descriptions, documentation, and director qualifications;
- Container storage area inspection records for 1997 through 1999;
- Closed surface impoundment inspection records for 1996 through 1999;
- Drip pad assessment, clean up and inspection records for 1996 through 1999;
- Waste Minimization Plan;
- Waste Analysis Plan;
- Notifications; and
- The contingency plan.

The following discussion addresses the problems and violations found during the records review.

Financial Assurance

The Facility did not have financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the records review.

EPA recommends that financial assurance documentation be kept at the actual Facility.

Training

A description of training, documentation of training and the training director's qualifications were reviewed for 1996 through 1998. The last training took place on May 15, 1998. The Facility had training scheduled for June 1999. During 1998, - Samuel Clemens did not receive training.

Kerr McGee was in violation of 40 C.F.R. § 265.16(c) because an employee did not take part in an annual review of the initial training required in paragraph (a) of this section.

Permit Condition II.D. requires that personnel training follow the attached outline, Permit Attachment II-1. This attachment specifically requires review of the Post-Closure Care Plan, Permit Attachment III-1. The Facility training description does not include a discussion of post-closure care.

Kerr McGee was in violation of Permit Condition II.D. for failing to include a post-closure care review in the annual training.

Drip Pad

The Facility did not have a description of the procedures for waste removal from the pad as required by 40 C.F.R § 262.34(a)(iii). The Facility did not have a annual certification for the drip pad for 1997. 40 C.F.R. § 265.441 as incorporated by § 262.34(a)(iii) requires an annual certification of the drip pad for drip pads that do not meet all the requirements of 40 C.F.R. § 265.443, specifically a leak detection and collection system.

Kerr McGee has failed to meet conditions for exemption from RCRA § 3005 by failing to store hazardous waste in compliance with 40 C.F.R. § 262.34(a)(iii) and 40 C.F.R. § 265.441 as incorporated by 40 C.F.R. § 262.34(a)(iii). Therefore, Kerr McGee is illegally storing hazardous waste.

Contingency Plan

The Facility had a Spill Prevention Control and Countermeasures Plan (SPCC Plan), dated October 22, 1998, and a contingency plan, dated January 1996. However, these plans did not contain addresses of the emergency coordinators, safety equipment location map, an emergency excavation plan, or a description of how the owner or operator will respond to the discharge of infrequent and incidental drippage in the storage yards.

Kerr McGee was in violation of 40 C.F.R. § 265.52(d)(e) and (f) because the contingency plan did not include the addresses of the emergency coordinators, a safety equipment location map, or an emergency excavation plan.

Kerr McGee failed to meet a condition for exemption from RCRA § 3005 by failing to store hazardous waste in compliance with 40 C.F.R. § 265.440(c) as incorporated by 40 C.F.R. § 262.34(a)(iii). 40 C.F.R. § 265.440(c) requires that the owner or operator maintain and comply with a contingency plan that describes how the owner or operator will respond to the discharge of infrequent and incidental drippage in the storage yards. Therefore, Kerr McGee is illegally storing hazardous waste.

Exit Meeting

The inspectors conducted the exit meeting at 5:30 p.m. Most of the violations noted in this report were discussed.

10) Signed

Mindy M. Gardner — Date: 8/25/99

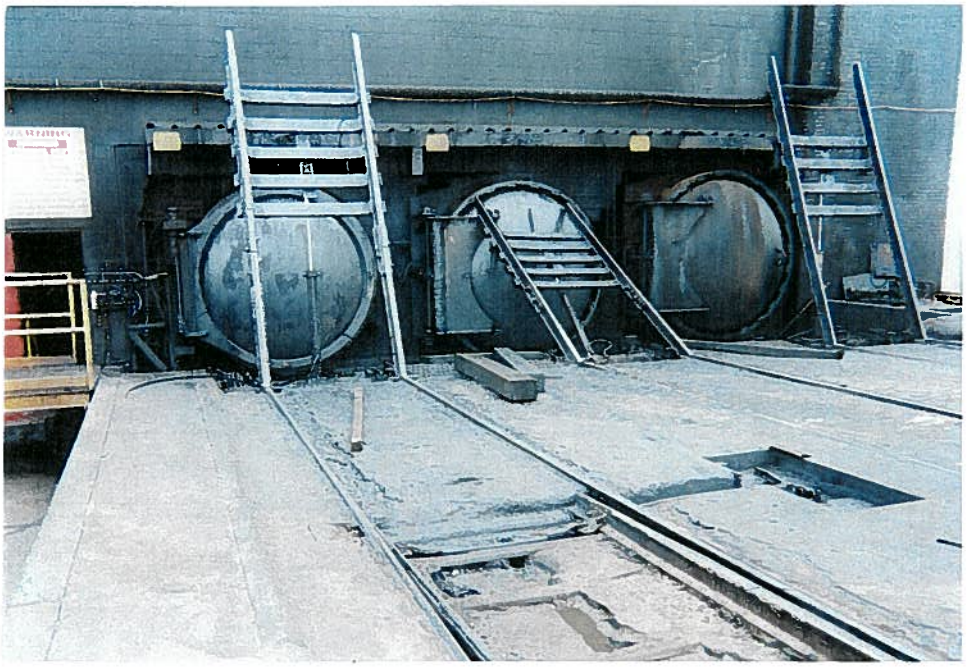
11) Concurrence/Approval

Jeffrey T. Pallas, Chief — Date: 8/25/99
South RCRA Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

Attachments:

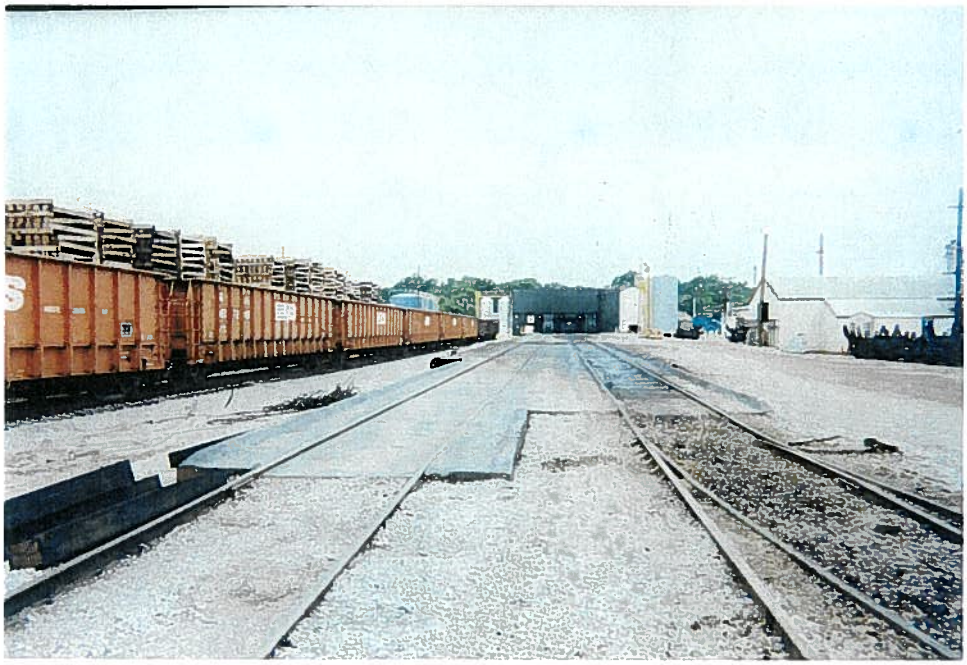
A. Photographs
B. RCRA Facility Investigation Phase II Report
C. Facility Map and Process Flow Diagram

ATTACHMENT A -
PHOTOGRAPHS



Photograph 1 - Treatment cylinders.

Photograph 2 - Container Storage Area.



Photograph 3 - Drip Pad.

Photograph 4 - Drip Pad.

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

June 19, 1999

Mr. Bruce Ferguson
Environmental Engineer
Mississippi DEQ- Office of Pollution Control
PO Box 10385
Jackson, MS 39289.0385

Re: 1998 Semi-Annual Corrective Action and Groundwater Monitoring Report
Kerr-McGee Chemical LLC - Columbus, Mississippi

Dear Mr. Ferguson:

In response to your letter dated May 19, 1999 concerning the submittal of the 1998 Semi-Annual Correction Action and Groundwater Monitoring Report by the Kerr-McGee Chemical LLC facility in Columbus, Mississippi, KMC LLC is providing the following clarification:

1) Monitor well CMW- 1AR shows two samples that show detects above the method detection limit (MDL). The point of clarification is that the well does not show any constituents above the MDL, these two samples are laboratory surrogates used in quality control for recoverability of samples. These are not from the aquifer and are only used to measure the reliability of the extraction methods. Therefore CMW - 1AR does not have any creosote constituents at the detectable limit.

2) Since lead is not a metal of concern for creosote, it is not readily sampled or analyzed for creosote contaminated sites. KMC LLC inadvertently overlooked this constituent and will sample for it during the next sampling analysis event.

Thank you for your time and consideration in this matter. If you have further questions, please do not hesitate to contact me, Steve Ladner at (405) 270-2625.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: Ron Murphey, Plant Manager
N.E. Bock
T.R. Reed

FOREST PRODUCTS

FILE COPY

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

January 14, 1999

Mr. Ron Murphey
Kerr-McGee Chemical Corporation
P.O. Box 906
Columbus, Mississippi 39703

Dear Mr. Murphey:

Re: RCRA - Compliance Evaluation Inspection
Kerr-McGee Chemical-Forest Products Division
Facility No. MSD990866329
Lowndes County - Columbus, MS

Please accept my apologies for the lengthy period taken to transmit this inspection report.

Enclosed please find an inspection report that was completed as a result of a hazardous waste compliance inspection at the referenced facility on July 14, 1998. This inspection revealed that Kerr-McGee Chemical LLC - Forest Products Division is in compliance with the applicable Mississippi Hazardous Waste Management Regulations (MHWMR).

If you have any questions, do not hesitate to contact me at (601) 961-5333.

Sincerely,

Kirk A. Shelton
Compliance Division

Enclosures
cc: Mr. Chuck Swann, KMCC
Ms. Mendy Gardner, EPA
Mr. David Lee, MDEQ

OFFICE OF POLLUTION CONTROL
P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612

MISSISSIPPI DEPARTMENT OF ENVIRONMENT QUALITY
RCRA INSPECTION REPORT
COMPLIANCE EVALUATION INSPECTION
KERR-MCGEE CHEMICAL CORPORATION
COLUMBUS, MISSISSIPPI

1. **Inspector and Author of Report**
   Kirk Shelton, Environmental Administrator
   Mississippi Office of Pollution Control (MOPC)

2. **Facility Information**
   Kerr-McGee Chemical Corporation (KMCC)
   Forest Products Division
   P.O. Box 906
   Columbus, Mississippi 39701
   MSD990866329

3. **Responsible Company Official**
   Ron Murphey, Kerr-McGee Chemical Corporation

4. **Inspection Participants**
   Chuck Swann, KMCC
   Kirk Shelton, MOPC
   Russ Twitty, MOPC

5. **Date and Time of Inspection**
   July 14, 1998, 10:00 a.m. CST.

6. **Applicable Requirements**
   Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 264, 265, 268, and 279 the facility's Hazardous Waste Post-Closure Permits No. HW -90-139-01.

7. **Facility Description**

The site now occupied by Kerr-McGee Chemical Corporation has been used as a wood treating facility since 1928. KMCC acquired the site in 1964 and continued to produce treated railroad ties, switch ties, crossings, and piling using creosote as a preservative. Pentachlrophenol was also used as a preservative prior to 1976.

The facility is permitted to conduct post-closure and groundwater corrective action activities. In June of 1986, KMCC certified closure of a two hazardous waste surface impoundments, an aeration basin and a sedimentation basin in which bottom sediment sludge from process wastewater accumulated. The surface impoundments were replaced by upgrading production process oil/water separators to recycle preservatives for re-application within the production process. The wastewater is then pumped to the wastewater treatment system which operates under a pretreatment permit and is discharged to the City of Columbus POTW.

Presently, the groundwater corrective action system consists of 13 groundwater recovery wells and two recovery trenches. Recovered groundwater is pumped to an above ground oil-water separator with a capacity of 35,000 gallons. After the separation process, the wastewater is sent through the facility wastewater treatment system and discharged to the POTW. During periods of heavy rains and subsequent high groundwater recovery rates, the facility uses a tank for storage of groundwater. This storage of groundwater is sometimes necessary to prevent exceeding the POTW discharge limits.

In 1998, KMCC installed a concrete drip track to collect excess preservative drippage from treated wood after removal from the pressure cylinder. In December of 1991, the drip track was certified by a professional engineer that the track met the requirements of 40 CFR 264.571. The drip pad operates under Part 265 Subpart W regulations.

The facility has two black tie storage areas. The smaller of the areas is located north of 14th Avenue and the larger area is located south of the 14th Avenue. The facility maintains a contingency plan at the facility for the remediation of incidental spills and drippage and these areas are therefore not subject to Part 265 Subpart W regulations.

The facility maintains a less than 90 day container storage area for drum storage. The drums contained F034 waste. The HSWA portion of the facility's RCRA Permit was issued August 1, 1995.

8. Findings

The regulated units at the facility were visually inspected. The closed surface impoundment area appeared to be in good condition with no sign of erosion of the cover. Documentation of the required facility impoundment inspections were reviewed and no noncompliance was noted.

The facility has two black tie storage areas. The black tie storage areas appeared to be in good condition with no apparent spills and few areas with incidental drippage. The facility maintains a contingency plan for cleaning up incidental spills and drippage. The clean-up is documented and the documentation is maintained at the facility. Inspection of the storage yard is performed and documented daily.

The facility maintains a drip pad which is properly coated and free of cracks. The pad has a berm around the perimeter to prevent run off and run-on during storm events. Precipitation and wash water from the pad drains to a sump. The water is then pumped to the wastewater treatment system. Documentation of weekly drip pad inspections, as well as, documentation of drip pad cleaning events were reviewed and found to be in order. The drip pad is well maintained as the records documented.

Treated wood is held on the drip pad until dripping has ceased. The facility maintains records of the time a specific charge is held on the drip pad.

All containers in the less than 90 day storage area were closed, properly labeled, and in good condition. Documentation of weekly container storage area inspections were reviewed and found to be adequate.

The facility maintains hazardous waste manifests for shipments of hazardous waste. These records were reviewed and no noncompliance was noted.

The facility maintains documentation of RCRA personnel training. The date of the most recent training was May 15, 1998.

Financial assurance for post-closure and corrective action is provided through a financial test. At the time of the inspection, the most recent financial test had been submitted in March of 1998 and provided $186,739 for post-closure activities and $748,138 for corrective action activities. These figures were adjusted from the previous years financial assurance.

The facility submits semiannual reports to the Executive Director on the effectiveness of the corrective action program. On March 1, 1998, the first semiannual report was submitted to our office. This report was found to meet the facility's permit requirements. We received the second semiannual on October 1, 1998, and also received the response to Bruce Ferguson's letter concerning this report.

9. Conclusions

No apparent violations were found on the day of the inspection.

10. Signatures

Phil A Martin _____ 1-14-99

Date

David Lee _____ 1/14/99

Date

Compliance Evaluation
Inspection
Checklists

Table of Contents

Part 1

General Site Information

Facility Name: Kerr-McGee Chemical Corporation
Address:

I.D. Number: MSD 990866329
Contact: Steve Latner
Title:
Phone Number: 405 270 2625

Type of Ownership:

___Federal ___State ___County ___Municipal X Private

Facility Status:

X Generator ___Transporter ___Treatment ___Storage X Disposal

Regulatory Status:

___Interim Status ___Part B Submitted
X Permitted ___Part B in Preparation

Principal Inspector Name: Kirk Shelton Title: Environmental Administrator
Organization: MDEQ Phone Number: 601 961 5333

Inspection Participants:

Name	Title	Representing
Chuck Swann		KMCC
Kirk Shelton		MDPC
Russ Twitty		MDPC

Part ___

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? X Yes __No __NA

   a. If yes, EPA I.D. No. __ __ __ __ __ __ __ __ __ __ __ __
      If no, explain. _____

2. Has facility received hazardous waste from a foreign source? __Yes X No __NA

   a. If yes, has it filed a notice with the Regional Administrator? __Yes __No __NA

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? X Yes __No __NA

   a. If yes, does it include: (264.13) (265.13)

      1. Parameters for which each waste will be analyzed? X Yes __No __NA
      2. Test methods used to test for these parameters? X Yes __No __NA
      3. Sampling method used to obtain sample? X Yes __No __NA
      4. Frequency with which the initial analyses will be reviewed or repeated? X Yes __No __NA
      5. (For offsite facilities) waste analyses that generators have agreed to supply? __Yes __No X NA
      6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:

         a. Procedures to be used to determine the identity of each movement of waste. __Yes __No X NA
         b. Sampling method to be used to obtain representative sample of the waste to be identified. __Yes __No X NA

4. Does the facility provide adequate security through: (264.14) (265.14)

   a. 24-hour surveillance system (e.g., television monitoring or guards)? __Yes __No __NA

OR

   b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? X Yes __No __NA

      Describe Fence

      AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? X Yes __No __NA

Describe Controlled roadway access

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

a. Monitoring equipment? X Yes __No __NA
b. Safety and emergency equipment? X Yes __No __NA
c. Security devices: X Yes __No __NA
d. Operating and structural equipment? X Yes __No __NA
e. Types of problems of equipment:

1. Malfunction X Yes __No __NA
2. Operator error X Yes __No __NA
3. Discharges X Yes __No __NA

6. Does the owner/operator maintain an inspection log? X Yes __No __NA

a. If yes, does it include:

1. Date and time of inspection? X Yes __No __NA
2. Name of inspector? X Yes __No __NA
3. Notation of observations? X Yes __No __NA
4. Date and nature of repairs or remedial action? X Yes __No __NA
5. Identification of potential problems? X Yes __No __NA

b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) __Yes X No __NA

c. Are records kept a minimum of three years? X Yes __No __NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? X Yes __No __NA

Date of most recent training: 5-15-98

How long are they kept? Indefinite

a. If yes, do they include:

1. Job title and written job description of each position? X Yes __No __NA
2. Description of type and amount of training? X Yes __No __NA
3. Records of training given to facility personnel? X Yes __No __NA

Requirements for Ignitable, Reactive, or Incompatible Waste (264.17) (265.17)

8. Does facility handle ignitable or reactive wastes? __Yes X No __NA

   a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

      1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
      2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

   b. Are smoking and open flames confined to specifically designated locations? X Yes __No __NA

   c. Are "No Smoking" signs posted in hazardous areas? X Yes __No __NA

   d. Are precautions documented (Part 264 only)? X Yes __No __NA

9. Check containers

   a. Are containers leaking or corroding? __Yes X No __NA

   b. Is there evidence of heat generation from incompatible wastes? __Yes X No __NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31) __Yes X No __NA

   If yes, use narrative explanation sheet to explain.

2. Is the facility equipped with: (264.32) (265.32)

   a. Internal communication or alarm system? X Yes __No __NA

      1. Is it easily accessible in case of emergency? X Yes __No __NA

   b. Telephone or two-way radio to call emergency response personnel? X Yes __No __NA

   c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? X Yes __No __NA

   d. Water of adequate volume of hoses, sprinkers, or water spray system? X Yes __No __NA

      1. Describe source of water City of Columbus

3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35)(265.35) X Yes __No __NA

4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) X Yes __No __NA

5. In the case that more than one police or fire department might respond, is there a designated primary authority? __Yes __No X NA (264.37) (265.37)

   a. If yes, name primary authority _____

6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) X Yes __No __NA

   a. Are they reaily available to all personnel? X Yes __No __NA

7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) X Yes __No __NA

8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) X Yes __No __NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? (264.53) (265.53) X Yes __No __NA

   a. If yes, is it a revised SPCC Plan? __Yes X No __NA

   b. Does contingency plan include: (264.52) (265.52)

      1. Arrangements with local emergency response organizations? X Yes __No __NA
      2. Emergency coordinator's names, phone numbers and addresses? X Yes __No __NA
      3. List of all emergency equipment at facility and descriptions of equipment? X Yes __No __NA
      4. Evacuation plan for facility personnel? X Yes __No __NA

2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) X Yes __No __NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) __Yes X No __NA

   a. If yes, does the owner/operator retain copies of all manifests? __Yes __No X NA

      1. Are the manifests signed and dated and returned to the generator? __Yes __No X NA
      2. Is a signed copy given to the transporter? __Yes __No X NA

2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) __Yes X No __NA

   a. If yes, is it accompanied by a shipping paper? __Yes __No X NA

      1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? __Yes __No X NA
      2. Is a signed copy given to the transporter? __Yes __No X NA

3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) __Yes X No __NA

   a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? __Yes __No X NA

      1. If no, has Regional Administrator been notified? __Yes __No X NA

4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) __Yes __No X NA

   a. If yes, does it include:

      1. Description and quantity of each hazardous waste received? __Yes __No __NA
      2. Methods and dates of treatment, storage, and disposal? __Yes __No __NA
      3. Location and quantity of each hazardous waste at each location? __Yes __No __NA
      4. Cross-references to manifests/shipping papers? __Yes __No __NA
      5. Records and results of waste analyses? __Yes __No __NA
      6. Report of incidents involving implementation of the contingency plan? __Yes __No __NA
      7. Records and results of required inspections? __Yes __No __NA
      8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? __Yes __No __NA
      9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? __Yes __No __NA
      10. Notices of generators as specified in MHWMR 264.12(b) (Part 264)? __Yes __No __NA

   b. Does facility have copy of permit on site? __Yes __No __NA

5. Does the facility submit a ~~biennial~~ annual report by March 1 every even-numbered year? (264.75) (265.75) X Yes __No __NA

   a. If yes, do reports contain the following information:

      1. EPA I.D. number? X Yes __No __NA
      2. Date and year covered by report? X Yes __No __NA
      3. Description/quantity of hazardous waste? X Yes __No __NA
      4. Treatment, storage, and disposal methods? X Yes __No __NA
      5. Monitoring data under MHWMR 265.94(a)(2) and (b)(2) (Part 265)? X Yes __No __NA
      6. Most recent closure and post-closure cost estimates? X Yes __No __NA

7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? X Yes __No __NA
8. Certification signed by owner/operator? X Yes __No __NA

6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) __Yes X No __NA

   a. If yes, has he submitted an unmanifested waste report to the Executive Director? __Yes __No X NA

7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure? __Yes __No X NA

Part ____

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No.? (262.12) X Yes __No __NA

   a. If yes, EPA I.D. No. _____

Section B - Manifest

1. Does generator ship waste offsite? (262.20) X Yes __No __NA

   a. If no, do not fill out Sections B and D.

   b. If yes, identify primary offiste facility(s).

   _____

2. Does generator use manifest? (262.20) X Yes __No __NA

   a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? __Yes __No X NA

      1. If yes, does generator indicate this when sending waste to a TSD facility? __Yes __No X NA

   b. If yes, does manifest include the following information?

      1. Manifest document No. X Yes __No __NA
      2. Generator's name, mailing address, telephone number X Yes __No __NA
      3. Generator EPA I.D. No. X Yes __No __NA
      4. Transporter Name(s) and EPA I.D. No.(s) X Yes __No __NA
      5. a. Facility name, address, and EPA I.D. No. X Yes __No __NA
         b. Alternate facility name, address, and EPA I.D. No. X Yes __No __NA
         c. Instructions to return to generator if undeliverable X Yes __No __NA
      6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) X Yes __No __NA
      7. Emergency information (optional) (special handling instructions, telephone No.) X Yes __No __NA
      8. Is the following certification on each manifest form? X Yes __No __NA

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

      9. Does generator retain copies of manifests? X Yes __No __NA

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? X Yes __No __NA
2. Who signed for generator?

Name _____ Title _____

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? X Yes __No __NA
2. Who signed and dated for transporter?

Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? X Yes __No __NA

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? X Yes __No __NA

e. Does generator retain copies for 3 years? X Yes __No __NA

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? (261.30) X Yes __No __NA

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) F034 K001

2. Does generator solid waste(s) listed in Subpart C that exhibit hazadous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20) __Yes X No __NA

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____

b. Does generator determine characteristics by testing or by applying knowledge of processes?_____

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? __Yes __No __NA

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? __Yes X No __NA

a. If yes, did generator test all wastes to determine nonhazardous characteristics? __Yes __No __NA

1. If no, list wastes and quantities deemed nonhazardous or processes from which non-hazardous waste was produced (use additional sheet if necessary).

_____
_____
_____
_____

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? (262.30) — X Yes __No __NA

2. a. Are containers to be shipped leaking or corroding? __Yes X No __NA
   b. Use sheet to describe containers and condition.
   c. Is there evidence of heat generation from incompatible wastes in the containers? (262.31) __Yes X No __NA

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? X Yes __No __NA

4. Does generator mark each package in accordance with 49 CFR 172? X Yes __No __NA

5. Is each container of 110 gallons or less marked with the following label? (262.32) X Yes __No __NA

   Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

   Generator name(s) and address(es) _____

   _____

   Manifest document No. _____

6. Does generator have placards to offer to transporters? (262.33) X Yes __No __NA

7. Accumulation time: (262.34)

   a. Are containers used to temporarily store waste before transport? X Yes __No __NA

      1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time) X Yes __No __NA

   b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) X Yes __No __NA

      2. If yes, with what frequency? weekly

   c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) __Yes __No X NA

NOTE: If tanks are used, fill out checklist for tanks.

   d. Are the containers labeled and marked in accordance with Section D-3, D-4, and D-5 of this form? __Yes __No X NA

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

   e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) __Yes __No X NA

8. Describe storage area. Use photos and narrative explanation sheet.

Section E - Recordkeeping and Records (262.40)

1. Does generator keep the following reports for 3 years?

a. Manifests and signed copies from	X Yes	__No	__NA
b. Biennial Reports	X Yes	__No	__NA
c. Exception reports	X Yes	__No	__NA
d. Test results	X Yes	__No	__NA

2. Where are the records kept (at facility or elsewhere)?
Facility

3. Who is in charge of keeping the records?

Name Chuck Swann Title _____

Section F - Special Conditions

1. Has generator received from or transported to a foreign Administrator? __Yes X No __NA

a. If yes, has he filed a notice with the Regional Administrator?	__Yes	__No	X NA
b. Is this waste manifested and signed by a foreign cosignee?	__Yes	__No	X NA
c. If generator transported wastes out of the country, has he received confirmation of delivered shipment?	__Yes	__No	X NA

Appendix II - Less-than-Ninety Day Storage

1. Source/Data: Drums

2. Type(s) of waste: F034 & K001

3. Condition of containers: Good

a.	Containers closed?	X Yes	__No	__NA
b.	Containers properly labelled?	X Yes	__No	__NA
c.	Accumulation dates?	X Yes	__No	__NA
d.	Area inspected?	X Yes	__No	__NA

Part ___

CONTAINERS CHECKLIST

Section A - Use and Management (264.171) (265.171)

1. Are containers in good condition? X Yes __No __NA

Section B - Compatibility of Waste With Container (264.172)

1. Is container made of a material that will not react with the waste which it stores? X Yes __No __NA

Section C - Management of Containers (264.173) (265.173)

1. Is container always closed while holding hazardous waste? X Yes __No __NA

2. Is container handled so that it will not be opened, handled, or stored in a manner which may rupture it or cause it to leak? X Yes __No __NA

Section D - Inspections (264.174) (265.174)

1. Does owner/operator inspect containers at least weekly for leaks and deterioration? X Yes __No __NA

Section E - Containment (Part 264) (264.175)

1. Do container storage areas have a containment system? __Yes __No X NA

   a. Is the base free of cracks or gaps? __Yes __No X NA
   b. Is the base sloped or otherwise designed to drain and remove liquids? __Yes __No X NA
   c. Does the containment system have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container? __Yes __No X NA
   d. Is any method available to prevent run-on into the containment system? __Yes __No X NA
   e. Is spilled or leaked material or accumulated precipitation removed from the containment area in a timely manner? __Yes __No X NA

Section F - Ignitable and Reactive Waste (264.176) (265.176)

1. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines? __Yes __No X NA

Section G - Incompatible Waste (264.177) (265.177)

1. Are incompatible wastes or materials placed in the same containers? __Yes X No __NA

2. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste? __Yes __No X NA

3. Are incompatible wastes separated from each other by a berm, dike, wall, or other device? __Yes __No X NA

Section H - Closure (Part 264) (264.178)

1. At closure, were all hazardous wastes and associated residues removed from the containment system? __Yes __No X NA

Part ___

GROUNDWATER MONITORING CHECKLIST

Section A - Monitoring System

1. Does the facility have a groundwater monitoring system in operation? X Yes __No __NA

   a. If yes, does the system consist of: (265.91)(264.97)

      1. At least one upgradient/background well? X Yes __No __NA
      2. At least three downgradient wells? X Yes __No __NA

   b. Are wells identified in the field? X Yes __No __NA

   c. Are well heads in good condition (i.e. free of cracks)? X Yes __No __NA

   d. Are well heads locked? X Yes __No __NA

   e. Do well heads have bumper guards or are otherwise protected? __Yes __No __NA

Section B - Sampling and Analysis (Part 264)

1. Does the facility obtain and analyze samples from the groundwater monitoring system? X Yes __No __NA

2. Has facility developed and followed a groundwater sampling and analysis plan? (264.97(d)) X Yes __No __NA

   a. If yes, does this plan include procedures and techniques for:

      1. Sample collection? X Yes __No __NA
      2. Sample preservation? X Yes __No __NA
      3. Analytical procedures? X Yes __No __NA
      4. Chain-of-custody control? X Yes __No __NA
      5. Determining the groundwater surface elevation? X Yes __No __NA

3. Has facility specified a statistical method to be used in evaluating groundwater monitoring data? X Yes __No __NA

4. Is all groundwater monitoring data recorded in the operating record? X Yes __No __NA

Section C - Detection Monitoring Program (264.98)

1. Has owner/operator established detection monitoring system to provide reliable indications for detection releases? __Yes __No X NA

   a. If yes, are the following components included in the system:

      1. Background values? __Yes __No __NA
      2. Determination of groundwater flow rate and direction annually? (264.98(e)) __Yes __No __NA
      3. Determination of statistically significant increases over background concentrations at each well? (264.98(f)) __Yes __No __NA
      4. If there was a statistically significant increase indicated, did the facility notify the Executive Director per 264.98(g)(1)? __Yes __No __NA
      5. Did facility attempt to demonstrate an apparent increase was not caused by a regulated unit per MHWMR 264.98(g)(6)? __Yes __No __NA
      6. Is all information contained in the facility's operating record? __Yes __No __NA

Section D - Compliance Monitoring Program (264.99)

1. Does the facility operate a compliance monitoring program? __Yes __No X NA

   a. If yes, does the facility:

      1. Determine the groundwater flow rate and direction in the uppermost aquifer annually? (264.99(e)) __Yes __No __NA
      2. Collect at least four samples from each well at least semi-annually? (264.99(f)) __Yes __No __NA
      3. Determine whether there is statistically significant evidence of increased contamination at each monitoring well? __Yes __No __NA
      4. If an increase was indicated, did facility notify the Executive Director? __Yes __No __NA
      5. Analyze samples for constituents listed in Appendix IX of Part 264 at least annually? __Yes __No __NA
      6. Record all information in the operating record? __Yes __No __NA

Section E - Corrective Action Program (Part 264 only) (264.100)

1. Does facility follow a corrective action program that meets the facility's permit requirements? X Yes __No __NA

Section F - Sampling and Analysis (Part 265)

1. Has the facility developed and followed a groundwater sampling and analysis plan? X Yes __No __NA

   a. If yes, does the plan include procedures and techniques for:

      1. Sample collection? X Yes __No __NA
      2. Sample preservation? X Yes __No __NA
      3. Analytical procedure? X Yes __No __NA
      4. Chain-of-custody control? X Yes __No __NA

2. Has the owner/operator established initial background concentrations or values of all parameters specified in 265.92(b)? __Yes __No X NA

   a. Samples collected to establish background quality (from above)? __Yes __No __NA
   b. Samples collected to indicate contamination (from above)? __Yes __No __NA
   c. Elevation of groundwater surface at each monitoring well at each sampling event? __Yes __No __NA

Section G - Preparation, Evaluation, and Response (Part 265 only) (265.93)

1. Did owner/operator prepare an outline of a groundwater quality assessment program? __Yes __No X NA

   a. If yes, did program determine the following:

      1. Whether hazardous waste or hazardous waste constituents have entered the groundwater? __Yes __No __NA
      2. Rate and extent of hazardous waste or hazardous waste constituent migration? __Yes __No __NA
      3. Concentrations of hazardous waste or hazardous waste constituents in groundwater? __Yes __No __NA

   b. For each well, has owner/operator calculated the arithmatic mean and variance, based on four replicate measurements for each sample, and compared the results with initial background mean? __Yes __No __NA

   c. Has owner/operator submitted information documenting any significant increase in comparisons for up-gradient wells (or decrease in pH)? __Yes __No __NA

   d. If the comparisons for downgradient wells show a significant increase (or pH decrease), has the owner/operator obtained additional groundwater samples from

those downgradient wells in which a significant decrease was detected? (Samples must be split in two, and analyses must be obtained of all additional samples to determine whether the significant difference was a result of lab error) __Yes __No __NA

1. If analyses (described above) were performed, and confirmed the significant increase (or pH decrease), did owner/operator notify Regional Administrator within 7 days? __Yes __No __NA
2. If analyses confirmed significant increase (or pH decrease), did owner/operator submit to the Executive Director within 15 days after notification (discussed above) a certified groundwater quality assessment program? __Yes __No __NA
3. Did owner/operator implement the groundwater quality assessment program and, at a minimum, did he determine the following: __Yes __No __NA

    a. Rate and extent of migration of the hazardous waste constituents in the groundwater? __Yes __No __NA
    b. Concentrations of the hazardous waste in the groundwater? __Yes __No __NA

4. Did owner/operator submit a report to the Executive Director containing the requests of the assessment outlined in No. 3 above within 15 days? __Yes __No __NA
5. Did owner/operator notify the Executive Director of reinstatement of indicator evaluation program upon finding that no hazardous waste or hazardous waste constituents had entered the groundwater? __Yes __No __NA
6. If owner/operator determined that hazardous waste or hazardous waste constituents entered the groundwater, did he either continue to make the determinations listed in No. 3 above on a quarterly basis until final closure or groundwater quality assessment plan was implemented prior to post-closure care, or cease to make determinations required in No. 3 above if groundwater quality assessment plan was implemented during post-closure? __Yes __No __NA
7. If any groundwater quality assessment program is implemented to satisfy No. 3 above prior to final closure, has owner/operator completed program and reported to the Executive Director, as outlined in No. 4 above? __Yes __No __NA
8. If owner/operator does not monitor at least annually to satisfy No. 3 above, does owner/operator evaluate data on groundwater elevation

obtained under No. 3c in Section F above to determine whether the requirements for locating monitoring wells are satisfied? __Yes __No __NA

a. If evaluation shows that the requirements for monitoring wells are not satisfied, has owner/operator modified the number, location, or depth of the monitoring wells to bring the system into compliance? __Yes __No __NA

Section H - Recordkeeping and Reporting (Part 265 only) (265.94) Not Applicable

1. Unless owner/operator is monitoring to satisfy the requirements of Section 265.93(d)(4), does owner/operator:

   a Keep records of the analyses required in Section 265.92(c) and (d), groundwater surface elevations required in 265.93(b) throughout the active life of the facility and throughout post-closure? __Yes __No __NA

   b. Report the following information to the Executive Director:

      1. Within 15 days of analysis for each quarterly sampling event, does owner/operator submit results of background concentrations? __Yes __No __NA
      2. Does owner/operator inform the Executive Director about any parameters that exceed maximum contaminant levels listed in Appendix III? __Yes __No __NA
      3. (Annually) does owner/operator report concentrations or values of parameters listed in Section 265.92(b)(3) for each well, including required evaluationg for these parameters under Section 265.93(b)? __Yes __No __NA

         a. Does owner/operator also identify differences from initial background concentrations found in the upgradient wells no later than March 1 following each calendar year? __Yes __No __NA

2. Does owner/operator submit results of the groundwater surface elevations under Section 265.93(f), along with a description of the response, if needed? __Yes __No __NA

3. If groundwater is monitored to satisfy requirements of Section 265.93(d)(4), did owner/operator do the following:

   a. Keep records of analyses and evaluations specified in the plan throughout active life and post-closure? __Yes __No __NA

   b. (Annually, until final closure) submit to the Regional Administrator a report containing the results of the groundwater quality assessment program, including the calculated rate of migration of hazardous waste or hazardous waste constituents by March 1? __Yes __No __NA

Part ___

FINANCIAL REQUIREMENTS CHECKLIST

Section A - Closure

1. Is facility required to provide financial assurance for closure? __Yes X No __NA

   a. Type of financial assurance _____
   b. Amount of closure costs _____
      1. Date of most recent adjustment _____
   c. Effective date of mechanism _____
   d. Expiration date of mechanism _____
   e. Is instrument adequate? __Yes __No __NA

Section B - Post-Closure

1. Is facility required to provide financial assurance for post-closure care? X Yes __No __NA

   a. Type of financial assurance Financial Test
   b. Amount of closure costs 186,739
      1. Date of most recent adjustment March 1998
   c. Effective date of mechanism March 1 1998
   d. Expiration date of mechanism March 1, 1999
   e. Is instrument adequate? X Yes __No __NA

Section C - Corrective Action

1. Is facility required to provide financial assurance for corrective action? __Yes __No __NA

   a. Type of financial assurance Financial Test
   b. Amount of closure costs 748,138
      1. Date of most recent adjustment March 1998
   c. Effective date of mechanism Mar[illegible]
   d. Expiration date of mechanism Mar[illegible]
   e. Is instrument adequate? X Yes __No __NA ?

Section D - Liability Requirements

1. Is facility required to provide liability coverage for sudden accidental occurrences? X Yes __No __NA

   a. Type of assurance Financial Test
   b. Is amount at least $1 million per occurrence, $2 million annual aggregate? X Yes __No __NA
   c. Effective date of mechanism March 1 1998
   d. Expiration date of mechanism March 1, 1999

2. Is facility required to provide liability coverage for non-sudden accidental occurrences? X Yes __No __NA

   a. Type of assurance Financial Test
   b. Is amount at least $3 million per occurrence, $6 million annual aggregate? X Yes __No __NA
   c. Effective date of mechanism March 1, 1998
   d. Expiration date of mechanism March 1, 1999

KERR-McGEE CHEMICAL LLC
2300 14TH AVENUE NORTH • COLUMBUS, MISSISSIPPI 39701

November 29, 2000

Mississippi Department of Natural Resources
Bureau of Pollution Control
Attention: Larry Hamil
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Hamil:

Attached please find a revised Hazardous Waste Facility Contingency Plan for Kerr McGee Chemical LLC – Forest Products Division' s Columbus, Mississippi facility. The only revisions that were made were in the Emergency Coordinators section. Should you have any questions or comments, please advise.

Sincerely,

KERR-MCGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Charles J. Swann
Assistant Plant Manager

Enclosures

RPM/cjs

cc: N. Bock
S. Ladner

FOREST PRODUCTS

KERR-McGEE CHEMICAL LLC
Forest Products Division
HAZARDOUS WASTE FACILITY
CONTINGENCY PLAN

Revised 11/00

This contingency plan is submitted in compliance with 40 CFR 265.

1. GENERAL INFORMATION

- Name: Kerr-McGee Chemical LLC, Wood Preserving Plant
- Location: 2300 14th Avenue North, Columbus, Mississippi
- Plant Manager: Ronald P. Murphey
  884 Timber Creek Drive
  Columbus, MS 39702

  Telephone: (Home) 662-327-1095
  (Work) 662-328-7551
  (Cell) 662-574-1164
- Type of Facility: 1) Hazardous Waste Container Storage Area
  2) Closed Surface Impoundment's
- Description of Activities: Wood Preserving. SIC code 2491. Creosote solution is used as a wood preservative in the production process. With the exception of remediation projects, the facility does not routinely generate hazardous waste through plant operations.

2. EMERGENCY COORDINATORS

- Principal: Charles Swann, Assistant Plant Manager
  47 Powers Place
  Columbus, MS 39702

  Telephone: (Home) 662-329-4741
  (Office) 662-328-7551
  (Cell) 662-241-0288
- Alternate: D. O. Yarbrough, Superintendent – Production
  40306 Caledonia Road
  Hamilton, MS 39746

  Telephone: (Home) 662-343-5103
  (Work) 662-328-7551

- The emergency coordinators can deputize other employees to assist them in the event of an emergency.

  The emergency coordinator serves as chief of the emergency crew, which is complete on each operating shift.

  The coordinators are on call, i.e., can be reached by telephone.

3. IMPLEMENTATION OF THE CONTINGENCY PLAN

The contingency plan will be implemented if an incident could threaten human health or the environment. The emergency coordinator has full authority to make this discussion. Depending upon the degree of seriousness, the following potential emergencies might call for the implementation of the contingency plan:

- Leak or rupture of containers in hazardous storage area (e.g., less than 90 days)

  The container storage area (drums) is located in the dike concrete containment area of the southeast corner of the retort building adjacent to the drip pad. In the event bulk quantities of hazardous waste are generated, a roll off container may be used and positioned adjacent to the work area.

Notification requirement under CERCLA will be implemented when the RQ is exceeded for constituents from:

- Leak or rupture of process storage containment area A or B.
- Leak or rupture of production process oil/water separator.
- Leak or rupture of production process treatment tanks.
- Leak or rupture of production process pumps, filters or lines creating potential danger to human health or the environment.
- Leak or rupture of groundwater remediation system.

4. EMERGENCY RESPONSE PROCEDURES

- Notification

→ Any employee discovering a fire or hazardous release that is not readily controllable with equipment and materials at hand must activate the emergency alarm system and contact the emergency coordinator.

→ In a reportable incident, the emergency coordinator will call the following emergency numbers to report the incident:

NATIONAL RESPONSE CENTER **(800) 424-8802**

MISSISSIPPI BUREAU OF POLLUTION CONTROL
Day (601) 961-5171
Night (601) 961-5340

The report will include the following:

- Name and telephone number of the reporter.
- Name and address of this facility.
- Time and type of incident (e.g., spill occurred at 3:30 P.M.).
- Identification and quantity of materials involved.
- The extent of injuries (e.g., no injuries).
- The possible hazards to the environment and human health outside the facility (e.g., possible contamination of ground water).
- Containment and Control

EMERGENCY PROCEDURE

The emergency coordinator will take all necessary measures to contain the hazard and to prevent its spread to other nearby facilities, with the assistance of emergency personnel assigned by the various parties contacted. In case of a spill, a small bulldozer or backhoe will be available to construct an emergency containment berm. The hazardous waste will be properly stored until disposed at the designated container area.

In the event of a catastrophe (fire, explosion, etc) the facility will be evacuated. The local police and fire departments have been contacted in reference to their assistance in case of an emergency.

Both departments will supply manpower and aid to the best of their ability in controlling crowds, controlling and extinguishing fire, apply first aid and paramedic services, and directing traffic. There are local contractors on call to supply whatever equipment and manpower necessary to secure and clean up the affected area. The designated container storage area is to be inspected weekly by the plant personnel for the use and management of the containers whenever hazardous waste is in storage.

Where appropriate, the emergency coordinator will employ one or more of the following measurers to ensure maximum protection of the safety and health of employees, use of appropriate protection equipment and dismiss all nonessential personnel.

FOLLOW-UP ACTIONS

Following containment and control of the emergency, the emergency coordinator will provide for collection, treatment and disposal of the waste and contaminated soil, water, or other materials by appropriate personnel.

The emergency coordinator will ensure that all emergency equipment is restored to full operational status by the plant clean up crew.

The emergency coordinator, assisted by two other qualified persons, will investigate the cause of the emergency and will take steps to prevent a recurrence of such or similar incidents.

The emergency coordinator will make sure that the clean up and restoration have progressed at least to the point of not jeopardizing the health and safety of the employees, and that EPA, State and Local authorities have been notified, where appropriate, before permitting resumption's of the operations affected by the emergency.

5. EMERGENCY EQUIPMENT

- Emergency equipment for hazardous waste storage area, drip pad, waste water treatment system and treating department is stored in the warehouse located beside the retort building. Equipment includes, but is not limited to:

	Qty
1. Oil absorbent socks -	20
2. Oil absorbent booms -	5
3. Oil absorbent pads -	20
4. Overpack salvage drum -	1
5. Metal drumgs -	5
6. Shovels -	3
7. Oil dry bags -	5
8. Oil absorbent rolls -	1

A backhoe is also kept on the plant premises for use in emergency situations.

- A full face respirator, protective clothing, fire extinguishers, fire water, safety shower, and eye wash fountain are available at various locations within the facility.

- The container storage area is inspected once per week when in use. A weekly RCRA Inspection Report regarding deterioration and/or malfunction of containers is utilized whenever hazardous waste is being stored.

- Contractors with required training (29 CFR 1910.120) shall be used for all emergency responses.

- The main office, laboratory building, and adjacent operator's office house a small first aid station as well as breathing apparatus and protective clothing.

- The facility is equipped with an audio and visual alarm system.

- The telephone numbers of the principal and alternate emergency coordinators are included in this contingency plan.

- The following emergency medical services are available:

Doctors:	Family Medical Center	(662) 328-9623
Hospitals:	Baptist Memorial	(662) 243-1167
	Emergency Room	(662) 243-1151
	Ambulance	(662) 243-1565 or 911

- Other emergency assistance:

Columbus Fire Department	(662) 329-5121 or 911
Columbus Police Department	(662) 328-7511 or 911
POISON INFORMATION CENTER	(409) 765-1420

6. COORDINATOR AGREEMENTS

- Listed local hospital and medical services in Section 5 are already trained to handle potential toxic fume poisoning or chemical burn cases as well as other conceivable potential medical emergencies. The following signed coordination agreements from Columbus, Mississippi local emergency service departments are included in the facility's contingency plan:

Columbus Fire Department	Letter A attached
Columbus Police Department	Letter B attached
Columbus Ambulance Service	Letter C attached
Baptist Memorial Hospital	Letter D attached

7. EVACUATION PLAN

- A plan for controller shutdown and emergency evacuation of personnel is in effect. Controlled shutdown includes opening of main power switches, closing of treating room water lines, gas line valves, and storage of the boiler.

- The emergency coordinator will determine if areas outside and surrounding the affected area should be evacuated and, if necessary, obtain the services of the police or sheriff's department to ensure the safety of the community.

8. **REQUIRED REPORTS**

- The emergency coordinator will notify the EPA regional administrator and appropriate state and local authorities that the follow-up actions have been implemented.

- The operator will note in the operating record, the time, date, and details of any incident that required implementation of the contingency plan and will submit a written report on the incident to the EPA regional administrator in accordance with 40 DFR 264.56(j), within 15 days following the incident.

- The emergency coordinator will revise this contingency plan in accordance with the experience acquired during each emergency situation and will send copies of the revisions to each holder of the original plan.

Approval: Charles J Swann 11/28/00

Hazardous Waste Emergency Coordinator
Columbus Facility
Kerr-McGee Chemical LLC

Kerr McGee Lowndes Co. RCRA Compliance

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

October 6, 2000

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, 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 comments:

1. The increasing contamination at Monitoring Well CME29 is a concern. It may be desirable to utilize the permit reissuance process to propose a new Boundary Control Well in this area rather than have to request a permit modification shortly after permit issuance. Since the contamination in this area seems to be a trend, we also recommend that some investigatory work be performed to determine whether the contamination around CME29 is contiguous with the main plume rather than an isolated area as depicted on Figure 3.

2. A proposal is included on page 14 relative to replacing some of the monitoring wells. As you are probably aware, such action constitutes a permit modification per MHWMR 270.42. We again recommend that the permit reissuance process be utilized to effect this change.

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

d22:RCRA/gw1h00-1

Kerr McGee - Lowndes County
RCRA Compliance

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

September 29, 2000

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

Re: Kerr-McGee Chemical LLC -Forest Products Division
Columbus Mississippi Facility
2000 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 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 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

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR

Enclosures

cc: R. Murphey
T. Reed

FOREST PRODUCTS

FILE COPY

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
James I. Palmer, Jr., Executive Director

June 6, 2000

Mr. Keith Watson
Kerr-McGee Chemical Corporation
P.O. Box 25861
Oklahoma City, Oklahoma 73125

Re: Compliance Evaluation Inspection
Compliance Monitoring Inspection
Kerr-McGee Chemical Corporation
MSD 081 387 730
Lauderdale County-Meridian, MS

Dear Mr. Watson:

Enclosed please find an inspection report that was completed as a result of a Hazardous Waste Compliance Evaluation and Monitoring Inspection at the above referenced facility on May 15, 2000. This inspection revealed no apparent violations of Mississippi Hazardous Waste Management Regulations or the facility's hazardous waste management permit.

If you have any questions, do not hesitate to contact me at (601) 961-5094.

Sincerely,

Russ Twitty, P.E.
Environmental Compliance and
Enforcement Division

Enclosure
cc: Mr. Parveez Malick, EPA (w/ enclosure)

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

May 16, 2000

David Lee, P.E.
Mississippi Department Of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385

Re: Kerr-McGee Chemical LLC, Columbus, MS Wood Preserving Facility
Agreed Order, Section 2, Condition A.

Dear Mr. Lee:

Kerr-McGee Chemical LLC (KMCLLC) and the Mississippi Commission On Environmental Quality recently signed an agreed order with respect to a inspection at our Columbus, MS wood preserving facility.

In Section 2, Condition A of the agreed ordered, KMCLLC agreed to pay MDEQ $12,500.00 as full and complete settlement for the matters addressed in the agreed order within 30 days by certified check or money order. Please find enclosed a certified check in this amount.

Should you have comments or questions please telephone me at (405) 270-2394.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Nick Bock
Manager, Regulatory Compliance and Environmental Affairs

Enclosure

NEB/s

cc: R. P. Michel, KMCLLC
R. P. Murphey, Columbus Plant
M. Cunningham, KMC

FOREST PRODUCTS

THE BACK OF THIS DOCUMENT HAS AN ARTIFICIAL WATERMARK PRINTED IN A SPECIAL WHITE INK.

OFFICIAL CHECK

HOLD THE DOCUMENT AT A SMALL ANGLE TO SEE THIS SECURITY FEATURE.

341346703

BANK OF OKLAHOMA N.A.
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Tulsa, Oklahoma 74192

Issued By Integrated Payment Systems Inc., Englewood, Colorado
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Date 05-16-00

Pay to the Order of ***MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY*** $***12,500.00***

BANK OF OKLAHOMA $12,500 dols 00 cts

VOID OVER $12,500.00

KERR MCGEE CORPORATION
Remitter

BANK OF OKLAHOMA N.A.
Steven E. Nell
SENIOR VP & CONTROLLER
Authorized Signature

⑆022000868⑆68⑈099251 341346703

THE VARIABLE TONE BACKGROUND AREA OF THIS DOCUMENT CHANGES COLOR GRADUALLY AND SMOOTHLY FROM DARKER TONES AT BOTH TOP AND BOTTOM TO THE LIGHTEST TONE IN THE MIDDLE.

KERR MCGEE LOWNDES CO.
RCRA Compliance Golder file
LHC

KERR-MCGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

June 13, 2000

Mr. Russ McLean
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

Re: Miss DEQ and Kerr-McGee Drainage Ditch Samples
Columbus, Mississippi Facility
EPA I.D. Number MSD 990 866 329

Dear Mr. McLean:

During our meeting on April 12, 2000 is was called to our attention that you had not received a copy of the analytical data from the sampling of the drainage ditches in Columbus, Mississippi performed by the Miss DEQ in July of 1999. Kerr-McGee also split samples with the Miss DEQ. Enclosed please find a copy of the analytical results from the sampling for both the Miss DEQ and Kerr-McGee samples. Also, enclosed you will find a map depicting the location of the samples from the ditch. In addition, a Table has been prepared comparing the sample splits from DEQ and Kerr-McGee.

Please feel free to contact me, Steve Ladner at (405) 270-2625 with any questions, comments, and a proposed date for our meeting. Thank you for your time and consideration in this matter.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Stephen A. Ladner

Stephen A. Ladner
Staff Environmental Specialist

cc: Bruce Ferguson, MDEQ
Ron Murphy, KMC LLC - Columbus
Nick Bock, KMC LLC
Tom Reed, KM Hydrology

FOREST PRODUCTS

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Prepard For John Milner

SWLO Qualifiers Flags

Southwest Laboratory of Oklahoma

Qualifier		General Qualifier Flags
B	=	Analyze is detected in blank as well as sample
J	=	Estimated value: concentration is below limit of quantitation
T	=	Trace amount
>	=	Concentration greater than value reported
E	=	Compound exceeds calibration range
D	=	Sample dilution run or surrogates diluted out Sample run at secondary dilution
I	=	Not quantifiable due to matrix interference
*	=	Surrogate outside of QC limits on both original and re-analysis

SAMPLING DATA SHEETS IN POCKET FILE

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Kerr-McGee Chemical and Mississippi Department of Environmental Quality

Stream Study - Columbus, Mississippi

Prepared By N. Bock, November 4, 1999

Sample Point->	SW Outfall #9 @ BNSF Track				14th Ave. N. behind Grahm Roofing				14 th. Ave. behind Grhm Roofing				West of C&G Main Line @KMLLC				14 th. Ave. & 23 rd St. N.			
Sample Type->	MFC6 Stream Sediment (0-12" Composite)				MFC7 Stream Sediment (0-12" Composite)				MFC8 Asphaltic-Like Meterial				MFC9 Stream Sediment (0-12" Composite)				MFC10 Stream Sediment (0-12" Composite)			
Sample Date->	7/1/99				7/1/99				7/1/99				7/1/99				7/1/99			
Matrix: SOIL LAB#->	39270.06				39270.07				39270.08				39270.09				39270.1			
	SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ	
Compounds-Semivolatile	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"
PHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	380	U	330	ND	410	U	330	ND
BIS(2-CHLOROETHYL)ETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-CHLOROPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	380	U	330	ND	410	U	330	ND
1,3-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,4-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZYL ALCOHOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,2-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-METHYLPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BIS(2-CHLOROISOPROPYL)ETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-METHYLPHENOL			330	ND			330	ND	580	J	330	ND			330	ND			330	ND
N-NITROSO-DI-N-PROPYLAMINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROETHANE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
NITROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
ISOPHORONE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-NITROPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4-DIMETHYLPHENOL	9500	U	330	ND	20	J	330	ND	11000	U	330	ND	22	J	330	ND	410	U	330	ND
BENZOIC ACID			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
BIS(2-CHLOROETHOXY)METHANE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4-DICHLOROPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,2,4-TRICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
NAPHTHALENE	490	J	330	ND	56	J	330	TRACE	1300	J	330	ND	33	J	330	ND	16000	D	330	29700
4-CHLOROANILINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROBUTADIENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-CHLORO-3-METHYLPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	390	U	330	ND	410	U	330	ND
2-METHYLNAPHTHALENE			330	ND			330	ND	1300	J	330	ND			330	ND			330	67600
HEXACHLOROCYCLOPENTADIENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4,6-TRICHLOROPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	380	U	330	ND	410	U	330	ND
2,4,5-TRICHLOROPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
2-CHLORONAPHTHALENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
DIMETHYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
ACENAPHTHYLENE	5200	J	330	TRACE	2600		330	TRACE	1000	J	330	ND	620		330	ND	5300	JD	330	6400
3-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
ACENAPHTHENE			330	TRACE			330	ND	2200	J	330	ND			330	4740			330	184000
2,4-DINITROPHENOL	24000	U	1600	ND	950	U	1600	ND	28000	U	1600	ND	980	U	1600	ND	1000	U	1600	ND
4-NITROPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
DIBENZOFURAN			330	TRACE			330	ND	1700	J	330	ND			330	4200			330	118000
2,4-DINITROTOLUENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,6-DINITROTOLUENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
DIETHYLPHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-CHLOROPHENYL-PHENYLETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
FLUORENE			330	TRACE			330	ND	3500	J	330	ND			330	6120			330	150000
4-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
4,6-DINITRO-2-METHYLPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
N-NITROSODIPHENYLAMINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-BROMOPHENYL-PHENYLETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
PENTACHLOROPHENOL	1100	J	660	ND	920	J	660	ND	28000	U	660	ND	92	J	660	ND	8900	JD	660	ND
PHENANTHRENE	34000		330	46500	980		330	TRACE	13000		330	ND	9200	D	330	23600	290000	D	330	185000
ANTHRACENE			330	TRACE			330	TRACE	2900	J	330	ND			330	3320			330	21600
DI-N-BUTYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
FLUORANTHENE	69000		330	56900	6700	D	330	4120	13000		330	ND	10000	D	330	14600	170000	D	330	182000
PYRENE			330	48900			330	4680	9500	J	330	ND			330	10400			330	166000
BUTYL BENZYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
3,3'-DICHLOROBENZIDINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZO(A)ANTHRACENE	22000		330	22400	3800	D	330	4160	3800	J	330	ND	3400	D	330	3330	28000	JD	330	39000
BIS(2-ETHYLHEXYL)PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
CHRYSENE			330	19400			330	5460	7600	J	330	ND			330	TRACE			330	28300
DI-N-OCTYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZO(B)FLUORANTHENE	38000		330	33500	8300	D	330	13900	11000	U	330	ND	2600	D	330	TRACE	14000	JD	330	24200
BENZO(K)FLUORANTHENE			330	ND			330	4090	11000	U	330	ND			330	TRACE			330	8130
BENZO(A)PYRENE	19000		330	19000	6600	D	330	7630	4000	J	330	ND	2300		330	TRACE	12000	JD	330	14800
INDENO(1,2,3-CD)PYRENE	16000		330	TRACE	6700	D	330	3800	11000	U	330	ND	1200		330	ND	4700	JD	330	TRACE
DIBENZ(A,H)ANTHRACENE	5100	J	330	ND	1600		330	ND	11000	U	330	ND	480		330	ND	2000		330	ND
BENZO(G,H,I)PERYLENE			330	TRACE			330	3900	11000	U	330	ND			330	ND			330	TRACE
CARBAZOLE	3900	J	330	TRACE	630		330	ND	11000	U	330	ND	230	J	330	ND	26000	JD	330	2900
2,3,4,6-TETRACHLOROPHENOL	9500	U			56	J			11000	U			390	U			920			
% MOISTURE	66			Unknown	13.3			Unknown	11.7			Unknown	14.6			Unknown	18.6			Unknown

Comparison Of Analytical Results

Privileged and Confidential
Prepard For John Milner

Comparison Of Analytical Results
Kerr-McGee Chemical and Mississippi Department of Environmental Quality
Stream Study - Columbus, Mississippi
Prepared By N. Bock, November 4, 1999

Sample Point->	N. 26th St. & N. 7th Ave.				Inside Wall of Steel Culvert				W. Side of Waterworks Rd.				N. Moss St. & N. Marvin St.				7th Ave N. @ EZ Serve			
Sample Type->	MFC1 Stream Sediment (0-12" Composite)				MFC2 Asphalt-Like Material				MFC3 Stream Sediment (0-12" Composite)				MFC4 Stream Sediment (0-12" Composite)				MFC5 Stream Sediment (0-12" Composite)			
Sample Date->	7/1/99				7/1/99				7/1/99				7/1/99				7/1/99			
Matrix: SOIL LAB#->	39270.01				39270.02				39270.03				39270.04				39270.05			
	SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ	
Compounds-Semivolatile	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*
PHENOL	68	J	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	720		330	ND
BIS(2-CHLOROETHYL)ETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-CHLOROPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
1,3-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,4-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZYL ALCOHOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,2-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-METHYLPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BIS(2-CHLOROISOPROPYL)ETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-METHYLPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
N-NITROSO-DI-N-PROPYLAMINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	TRACE
HEXACHLOROETHANE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
NITROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
ISOPHORONE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-NITROPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4-DIMETHYLPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
BENZOIC ACID			1600	ND	5200	J	1600	ND			1600	ND			1600	ND			1600	ND
BIS(2-CHLOROETHOXY)METHANE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4-DICHLOROPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,2,4-TRICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
NAPHTHALENE	1600		330	TRACE	1800	J	330	ND	670		330	ND	820		330	ND	240	J	330	ND
4-CHLOROANILINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
HEXACHLOROBUTADIENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-CHLORO-3-METHYLPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
2-METHYLNAPHTHALENE			330	ND	740	J	330	ND			330	ND			330	ND			330	ND
HEXACHLOROCYCLOPENTADIENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4,6-TRICHLOROPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
2,4,5-TRICHLOROPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
2-CHLORONAPHTHALENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
DIMETHYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
ACENAPHTHYLENE	3600		330	28600	10000	U	330	ND	440		330	TRACE	800		330	TRACE	33	J	330	ND
3-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
ACENAPHTHENE			330	ND	1300	J	330	ND			330	TRACE			330	ND			330	ND
2,4-DINITROPHENOL	1100	U	1600	ND	25000	U	1600	ND			1600	ND	1300	U	1600	ND	1000	U	1600	ND
4-NITROPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
DIBENZOFURAN			330	24800	1300	J	330	ND			330	ND			330	ND			330	ND
2,4-DINITROTOLUENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,6-DINITROTOLUENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
DIETHYLPHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	8110
4-CHLOROPHENYL-PHENYLETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
FLUORENE			330	49000	1400	J	330	ND			330	TRACE			330	ND			330	ND
4-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
4,6-DINITRO-2-METHYLPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
N-NITROSODIPHENYLAMINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-BROMOPHENYL-PHENYLETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
HEXACHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
PENTACHLOROPHENOL	1100	U	660	ND	1300	J	660	ND	200	J	660	ND	280	J	660	ND	23	J	660	ND
PHENANTHRENE	58000	D	330	67.5	7000	J	330	ND	7200	D	330	8380	6600	D	330	TRACE	780		330	ND
ANTHRACENE			330	ND	610	J	330	ND			330	TRACE			330	TRACE			330	ND
DI-N-BUTYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
FLUORANTHENE	310000	D	330	66100	28000		330	ND	9200	D	330	10000	16000	D	330	7200	3200		330	ND
PYRENE			330	113000	13000		330	ND			330	7500			330	6770			330	ND
BUTYL BENZYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
3,3'-DICHLOROBENZIDINE			660	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZO(A)ANTHRACENE	67000	D	330	38700	10000	U	330	ND	2600		330	3480	6600	D	330	3680	1400		330	ND
BIS(2-ETHYLHEXYL)PHTHALATE			330	ND	920	JB	330	ND			330	ND			330	TRACE			330	ND
CHRYSENE			330	31900	6900	J	330	ND			330	3700			330	5660			330	ND
DI-N-OCTYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZO(B)FLUORANTHENE	39000	JD	330	24900	10000	U	330	ND	2800		330	ND	7600	D	330	5930	170	J	330	ND
BENZO(K)FLUORANTHENE			330	7660	10000	U	330	ND			330	4140			330	TRACE			330	ND
BENZO(A)PYRENE	32000	JD	330	16300	3200	J	330	ND	2100		330	TRACE	4100		330	TRACE	970		330	ND
INDENO(1,2,3-CD)PYRENE	14000	JD	330	8760	10000	U	330	ND	1600		330	TRACE	3100		330	TRACE	580		330	ND
DIBENZ(A,H)ANTHRACENE	6200	JD	330	TRACE	10000	U	330	ND	600		330	ND	1300		330	ND	260	J	330	ND
BENZO(G,H,I)PERYLENE			330	5120	10000	U	330	ND			330	TRACE			330	TRACE			330	ND
CARBAZOLE	45000	U	330	TRACE	810	J	330	ND	340	J	330	ND	7900	D	330	ND	330	J	330	ND
2,3,4,6-TETRACHLOROPHENOL	450	U			10000	U			420	U			510	U			420	U		
% MOISTURE	26.6			Unknown	1.2			Unknown	20.8			Unknown	36.3			Unknown	20.6			Unknown

Privileged and Confidential
Prepard For John Milner

Kerr-McGee Chemical and Mississippi Department of Environmental Quality

Stream Study - Columbus, Mississippi

Prepared By N. Bock, November 4, 1999

Sample Point->	Maranatha Church M-1				Maranatha Church M-2				Maranatha Church M-3				Maranatha Church #1				Maranatha Church KM-1			
Sample Date->	5/28/99				5/28/99				5/28/99				5/27/99				5/28/99			
Matrix: SOIL LAB#->	Unknown Sample				Unknown Sample				Unknown Sample				Unknown Sample				Unknown Sample			
	SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ	
Compounds-Semivolatile	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"
PHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
BIS(2-CHLOROETHYL)ETHER			330	ND			330	ND			330	ND			330	ND			330	ND
2-CHLOROPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
1,3-DICHLOROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
1,4-DICHLOROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
BENZYL ALCOHOL			330	ND			330	ND			330	ND			330	ND			330	ND
1,2-DICHLOROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
2-METHYLPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
BIS(2-CHLOROISOPROPYL)ETHER			330	ND			330	ND			330	ND			330	ND			330	ND
4-METHYLPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
N-NITROSO-DI-N-PROPYLAMINE			330	ND			330	ND			330	ND			330	ND			330	ND
HEXACHLOROETHANE			330	ND			330	ND			330	ND			330	ND			330	ND
NITROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
ISOPHORONE			330	ND			330	ND			330	ND			330	ND			330	ND
2-NITROPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
2,4-DIMETHYLPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
BENZOIC ACID			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
BIS(2-CHLOROETHOXY)METHANE			330	ND			330	ND			330	ND			330	ND			330	ND
2,4-DICHLOROPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
1,2,4-TRICHLOROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
NAPHTHALENE			330	ND			330	21900			330	479000			330	617000			330	16900
4-CHLOROANILINE			330	ND			330	ND			330	ND			330	ND			330	ND
HEXACHLOROBUTADIENE			330	ND			330	ND			330	ND			330	ND			330	ND
4-CHLORO-3-METHYLPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
2-METHYLNAPHTHALENE			330	ND			330	16100			330	675000			330	793000			330	74800
HEXACHLOROCYCLOPENTADIENE			330	ND			330	ND			330	ND			330	ND			330	ND
2,4,6-TRICHLOROPHENOL			330	ND			330	ND			330	ND			330	ND			330	ND
2,4,5-TRICHLOROPHENOL			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
2-CHLORONAPHTHALENE			330	ND			330	ND			330	ND			330	ND			330	ND
2-NITROANILINE			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
DIMETHYL PHTHALATE			330	ND			330	ND			330	ND			330	ND			330	ND
ACENAPHTHYLENE			330	TRACE			330	ND			330	66300			330	ND			330	62100
3-NITROANILINE			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
ACENAPHTHENE			330	TRACE			330	23700			330	1270000			330	2160000			330	529000
2,4-DINITROPHENOL			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
4-NITROPHENOL			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
DIBENZOFURAN			330	ND			330	18200			330	1090000			330	2160000			330	462000
2,4-DINITROTOLUENE			330	ND			330	ND			330	ND			330	ND			330	ND
2,6-DINITROTOLUENE			330	ND			330	ND			330	ND			330	ND			330	ND
DIETHYLPHTHALATE			330	ND			330	ND			330	ND			330	ND			330	ND
4-CHLOROPHENYL-PHENYLETHER			330	ND			330	ND			330	ND			330	ND			330	ND
FLUORENE			330	TRACE			330	27300			330	1990000			330	3670000			330	734000
4-NITROANILINE			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
4,6-DINITRO-2-METHYLPHENOL			1600	ND			1600	ND			1600	ND			1600	ND			1600	ND
N-NITROSODIPHENYLAMINE			330	ND			330	ND			330	ND			330	ND			330	ND
4-BROMOPHENYL-PHENYLETHER			330	ND			330	ND			330	ND			330	ND			330	ND
HEXACHLOROBENZENE			330	ND			330	ND			330	ND			330	ND			330	ND
PENTACHLOROPHENOL			660	ND			660	ND			660	ND			660	ND			660	ND
PHENANTHRENE			330	6.28			330	88200			330	6390000			330	11900000			330	2000000
ANTHRACENE			330	7160			330	19400			330	946000			330	1300000			330	ND
DI-N-BUTYL PHTHALATE			330	ND			330	ND			330	ND			330	ND			330	ND
FLUORANTHENE			330	36000			330	38400			330	4020000			330	7690000			330	1720000
PYRENE			330	40800			330	39200			330	2600000			330	4890000			330	993000
BUTYL BENZYL PHTHALATE			330	ND			330	ND			330	ND			330	ND			330	ND
3,3'-DICHLOROBENZIDINE			330	ND			330	ND			330	ND			330	ND			330	ND
BENZO(A)ANTHRACENE			330	40500			330	12300			330	978000			330	1560000			330	696000
BIS(2-ETHYLHEXYL)PHTHALATE			330	TRACE			330	ND			330	ND			330	ND			330	ND
CHRYSENE			330	4230			330	ND			330	934000			330	1210000			330	308000
DI-N-OCTYL PHTHALATE			330	ND			330	ND			330	ND			330	ND			330	ND
BENZO(B)FLUORANTHENE			330	22100			330	ND			330	684000			330	939000			330	332000
BENZO(K)FLUORANTHENE			330	9220			330	ND			330	203000			330	404000			330	74700
BENZO(A)PYRENE			330	12800			330	ND			330	428000			330	731000			330	239000
INDENO(1,2,3-CD)PYRENE			330	5800			330	ND			330	172000			330	TRACE			330	86000
DIBENZ(A,H)ANTHRACENE			330	3510			330	ND			330	48400			330	ND			330	39300
BENZO(G,H,I)PERYLENE			330	4880			330	ND			330	196000			330	TRACE			330	90200
CARBAZOLE			330	ND			330	ND			330	378000			330	593000			330	ND
2,3,4,6-TETRACHLOROPHENOL																				
% MOISTURE				Unknown				Unknown				Unknown				Unknown				Unknown

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Kerr-McGee Chemical and Mississippi Department of Environmental Quality

Stream Study - Columbus, Mississippi

Prepared By N. Bock, November 4, 1999

	SW Outfall #9 @ BNSF Track				141h Ave. N. behind Grehm Roofing				14 th. Ave. behind Grhm Roofing				West of C&G Main Line @KMLLC				14 th. Ave. & 23 rd St. N.			
Sample Point->	MFC6				MFC7				MFC8				MFC9				MFC10			
Sample Type->	Stream Sediment (0-12" Composite)				Stream Sediment (0-12" Composite)				Asphaltic-Like Material				Stream Sediment (0-12" Composite)				Stream Sediment (0-12" Composite)			
Sample Date->	7/1/99				7/1/99				7/1/99				7/1/99				7/1/99			
Matrix: SOIL LAB#->	39270.06				39270.07				39270.08				39270.09				39270.1			
	SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ	
Compounds-Semivolatile	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*	ug/Kg	*Qual*
PHENOL	9500	U	330	ND	360	U	330	ND	11000	U	330	ND	390	U	330	ND	410	U	330	ND
BIS(2-CHLOROETHYL)ETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-CHLOROPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	390	U	330	ND	410	U	330	ND
1,3-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,4-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZYL ALCOHOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,2-DICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-METHYLPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BIS(2-CHLOROISOPROPYL)ETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-METHYLPHENOL			330	ND			330	ND	580	J	330	ND			330	ND			330	ND
N-NITROSO-DI-N-PROPYLAMINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROETHANE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
NITROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
ISOPHORONE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-NITROPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4-DIMETHYLPHENOL	9500	U	330	ND	20	J	330	ND	11000	U	330	ND	22	J	330	ND	410	U	330	ND
BENZOIC ACID			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
BIS(2-CHLOROETHOXY)METHANE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4-DICHLOROPHENOL			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
1,2,4-TRICHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
NAPHTHALENE	490	J	330	ND	56	J	330	TRACE	1300	J	330	ND	33	J	330	ND	16000	D	330	29700
4-CHLOROANILINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROBUTADIENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-CHLORO-3-METHYLPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	390	U	330	ND	410	U	330	ND
2-METHYLNAPHTHALENE			330	ND			330	ND	1300	J	330	ND			330	ND			330	57600
HEXACHLOROCYCLOPENTADIENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,4,6-TRICHLOROPHENOL	9500	U	330	ND	380	U	330	ND	11000	U	330	ND	390	U	330	ND	410	U	330	ND
2,4,5-TRICHLOROPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
2-CHLORONAPHTHALENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
DIMETHYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
ACENAPHTHYLENE	5200	J	330	TRACE	2600		330	TRACE	1000	J	330	ND	620		330	ND	5300	JD	330	6400
3-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
ACENAPHTHENE			330	TRACE			330	ND	2200	J	330	ND			330	4740			330	184000
2,4-DINITROPHENOL	24000	U	1600	ND	950	U	1600	ND	28000	U	1600	ND	980	U	1600	ND	1000	U	1600	ND
4-NITROPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
DIBENZOFURAN			330	TRACE			330	ND	1700	J	330	ND			330	4200			330	118000
2,4-DINITROTOLUENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
2,6-DINITROTOLUENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
DIETHYLPHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-CHLOROPHENYL-PHENYLETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
FLUORENE			330	TRACE			330	ND	3500	J	330	ND			330	6120			330	166000
4-NITROANILINE			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
4,6-DINITRO-2-METHYLPHENOL			1600	ND			1600	ND	28000	U	1600	ND			1600	ND			1600	ND
N-NITROSODIPHENYLAMINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
4-BROMOPHENYL-PHENYLETHER			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
HEXACHLOROBENZENE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
PENTACHLOROPHENOL	1100	J	660	ND	920	J	660	ND	28000	U	660	ND	92	J	660	ND	8900	JD	660	ND
PHENANTHRENE	34000		330	46500	980		330	TRACE	13000		330	ND	9200	D	330	23600	260000	D	330	186000
ANTHRACENE			330	TRACE			330	TRACE	2900	J	330	ND			330	3320			330	21600
DI-N-BUTYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
FLUORANTHENE	69000		330	56900	6700	D	330	4120	13000		330	ND	10000	D	330	14600	170000	D	330	152000
PYRENE			330	48900			330	4680	9500	J	330	ND			330	10400			330	166000
BUTYL BENZYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
3,3'-DICHLOROBENZIDINE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZO(A)ANTHRACENE	22000		330	22400	3800	D	330	4180	3900	J	330	ND	3400	D	330	3330	28000	JD	330	39000
BIS(2-ETHYLHEXYL)PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
CHRYSENE			330	19400			330	5460	7600	J	330	ND			330	TRACE			330	28300
DI-N-OCTYL PHTHALATE			330	ND			330	ND	11000	U	330	ND			330	ND			330	ND
BENZO(B)FLUORANTHENE	38000		330	33600	6300	D	330	13900	11000	U	330	ND	2600	D	330	TRACE	14000	JD	330	24200
BENZO(K)FLUORANTHENE			330	ND			330	4090	11000	U	330	ND			330	TRACE			330	8130
BENZO(A)PYRENE	19000		330	19000	9600	D	330	7930	4000	J	330	ND	2300		330	TRACE	12000	JD	330	14800
INDENO(1,2,3-CD)PYRENE	16000		330	TRACE	6700	D	330	3800	11000	U	330	ND	1200		330	ND	4700	JD	330	TRACE
DIBENZ(A,H)ANTHRACENE	5100	J	330	ND	1800		330	ND	11000	U	330	ND	480		330	ND	2000		330	ND
BENZO(G,H,I)PERYLENE			330	TRACE			330	3900	11000	U	330	ND			330	ND			330	TRACE
CARBAZOLE	3900	J	330	TRACE	630		330	ND	11000	U	330	ND	230	J	330	ND	26000	JD	330	2900
2,3,4,6-TETRACHLOROPHENOL	9500	U			59	J			11000	U			390	U			920			
% MOISTURE	85			Unknown	13.3			Unknown	11.7			Unknown	14.8			Unknown	18.6			Unknown

Comparison Of Analytical Results

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Comparison Of Analytical Results
Kerr-McGee Chemical and Mississippi Department of Environmental Quality
Stream Study - Columbus, Mississippi
Prepared By N. Bock, November 4, 1999

Sample Point->	N. 26th St. & N. 7th Ave.				Inside Wall of Steel Culvert				W. Side of Waterworks Rd.				N. Moss St. & N. Marvin St.				7th Ave N. @ EZ Serve			
Sample Type->	MFC1 Stream Sediment (0-12" Composite)				MFC2 Asphalt-Like Material				MFC3 Stream Sediment (0-12" Composite)				MFC4 Stream Sediment (0-12" Composite)				MFC5 Stream Sediment (0-12" Composite)			
Sample Date->	7/1/99				7/1/99				7/1/99				7/1/99				7/1/99			
Matrix: SOIL LAB#->	39270.01				39270.02				39270.03				39270.04				39270.05			
	SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ		SWLO ("See Qual")		MDEQ	
Compounds-Semivolatile	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"	ug/Kg	"Qual"
PHENOL	69	J	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	720		330	ND
BIS(2-CHLOROETHYL)ETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-CHLOROPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
1,3-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,4-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZYL ALCOHOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,2-DICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-METHYLPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BIS(2-CHLOROISOPROPYL)ETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-METHYLPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	TRACE
N-NITROSO-DI-N-PROPYLAMINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
HEXACHLOROETHANE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
NITROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
ISOPHORONE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-NITROPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4-DIMETHYLPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
BENZOIC ACID			1600	ND	5200	J	1600	ND			1600	ND			1600	ND			1600	ND
BIS(2-CHLOROETHOXY)METHANE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4-DICHLOROPHENOL			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
1,2,4-TRICHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
NAPHTHALENE	1600		330	TRACE	1600	J	330	ND	670		330	ND	820		330	ND	240	J	330	ND
4-CHLOROANILINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
HEXACHLOROBUTADIENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-CHLORO-3-METHYLPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
2-METHYLNAPHTHALENE			330	ND	740	J	330	ND			330	ND			330	ND			330	ND
HEXACHLOROCYCLOPENTADIENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,4,6-TRICHLOROPHENOL	450	U	330	ND	10000	U	330	ND	420	U	330	ND	510	U	330	ND	420	U	330	ND
2,4,5-TRICHLOROPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
2-CHLORONAPHTHALENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
DIMETHYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
ACENAPHTHYLENE	3600		330	28500	10000	U	330	ND	440		330	TRACE	800		330	TRACE	33	J	330	ND
3-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
ACENAPHTHENE			330	ND	1300	J	330	ND			330	TRACE			330	ND			330	ND
2,4-DINITROPHENOL	1100	U	1600	ND	25000	U	1600	ND			1600	ND	1300	U	1600	ND	1000	U	1600	ND
4-NITROPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
DIBENZOFURAN			330	24800	1300	J	330	ND			330	ND			330	ND			330	ND
2,4-DINITROTOLUENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
2,6-DINITROTOLUENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
DIETHYLPHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	6110
4-CHLOROPHENYL-PHENYLETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
FLUORENE			330	49000	1400	J	330	ND			330	TRACE			330	ND			330	ND
4-NITROANILINE			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
4,6-DINITRO-2-METHYLPHENOL			1600	ND	25000	U	1600	ND			1600	ND			1600	ND			1600	ND
N-NITROSODIPHENYLAMINE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
4-BROMOPHENYL-PHENYLETHER			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
HEXACHLOROBENZENE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
PENTACHLOROPHENOL	1100	U	660	ND	1300	J	660	ND	200	J	660	ND	290	J	660	ND	23	J	660	ND
PHENANTHRENE	56000	D	330	67.5	7000	J	330	ND	7200	D	330	6380	6600	D	330	TRACE	780		330	ND
ANTHRACENE			330	ND	610	J	330	ND			330	TRACE			330	TRACE			330	ND
DI-N-BUTYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
FLUORANTHENE	310000	D	330	95100	28000		330	ND	9200	D	330	10000	16000	D	330	7200	3200		330	ND
PYRENE			330	113000	13000		330	ND			330	7600			330	6770			330	ND
BUTYL BENZYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
3,3'-DICHLOROBENZIDINE			660	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZO(A)ANTHRACENE	67000	D	330	38700	10000	U	330	ND	2600		330	3480	5600	D	330	3680	1400		330	ND
BIS(2-ETHYLHEXYL)PHTHALATE			330	ND	920	JB	330	ND			330	ND			330	TRACE			330	ND
CHRYSENE			330	31900	6900	J	330	ND			330	3700			330	5850			330	ND
DI-N-OCTYL PHTHALATE			330	ND	10000	U	330	ND			330	ND			330	ND			330	ND
BENZO(B)FLUORANTHENE	39000	JD	330	24900	10000	U	330	ND	2800		330	ND	7600	D	330	5930	170	J	330	ND
BENZO(K)FLUORANTHENE			330	7560	10000	U	330	ND			330	4140			330	TRACE			330	ND
BENZO(A)PYRENE	32000	JD	330	16300	3200	J	330	ND	2100		330	TRACE	4100		330	TRACE	970		330	ND
INDENO(1,2,3-CD)PYRENE	14000	JD	330	6760	10000	U	330	ND	1600		330	TRACE	3100		330	TRACE	580		330	ND
DIBENZ(A,H)ANTHRACENE	6200	JD	330	TRACE	10000	U	330	ND	600		330	ND	1300		330	ND	260	J	330	ND
BENZO(G,H,I)PERYLENE			330	6120	10000	U	330	ND			330	TRACE			330	TRACE			330	ND
CARBAZOLE	45000	U	330	TRACE	810	J	330	ND	340	J	330	ND	7900	D	330	ND	330	J	330	ND
2,3,4,6-TETRACHLOROPHENOL	450	U			10000	U			420	U			510	U			420	U		
% MOISTURE	26.6			Unknown	1.2			Unknown	20.8			Unknown	35.3			Unknown	20.6			Unknown

Comparison Of Analytical Results

Kerr McGee Chemical
Lowndes Co.
Haz Waste - Compliance Fi
MSD 990866329
Kirk S.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

RECEIVED
APR 14 2000
Office of Pollution Control

APR 06 2000

4WD-RCRA

VIA FASCIMILE AND CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Don Watts, Chief
Mississippi Department of Environmental Quality
Environmental Compliance & Enforcement Division
Office of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39289

SUBJECT: EPA Enforcement Lead at Mississippi Facility

Dear Mr. Watts:

As you know, the 1996 Hazardous Waste Civil Enforcement Response Policy (ERP) set forth guidelines for maintaining a nationally consistent approach to RCRA enforcement. To ensure regional consistency, EPA Region 4 has established a system for conducting conference calls with each state to evaluate the State's adherence to the ERP. Since the conference call system was introduced, MDEQ has made considerable progress towards resolving outstanding violations. Conference call participants have been cooperative and extremely responsive to EPA concerns.

The ERP guidelines include target response times for completing formal enforcement actions in response to RCRA violations. One of EPA Region 4's roles is to enforce the time frames in the ERP and to assume the enforcement lead for those cases that exceed the ERP time frame. Day 300 at the Kerr McGee Chemical Corporation, Columbus, MS (MSD 990 866 329) facility will approach on April 10, 2000, as discussed with you and members of your staff at the Annual Review held on March 30, 2000. EPA will assume the enforcement lead for this facility in accordance with the most recent EPA/MDEQ Memorandum of Agreement, if the case has not been resolved by May 1, 2000

I would like to thank you and your staff for taking the time to review these cases with my staff, and for promptly providing copies of the facility files upon request. This letter is also being transmitted via facsimile to you on April 6, 2000. If you have any questions, please feel free to contact me at (404) 562-8568, or Mr. Jeffrey Pallas, of my staff, at (404) 562-8569.

Sincerely,

Jewell Grubbs, Chief
RCRA Enforcement and Compliance Branch
Waste Management Division

BEFORE THE MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

COMPLAINANT

VS. **ORDER NO. _____**

KERR MCGEE CHEMICAL CORPORATION
2300 14TH AVENUE
COLUMBUS, MS 39701
LOWNDES COUNTY
EPA ID MSD990866329
AIR PERMIT NO. 1680-00020

RESPONDENT

AGREED ORDER

COME NOW THE Mississippi Commission on Environmental Quality (Commission), Complainant, and Kerr McGee Chemical Corporation LLC, Respondent, in the above captioned cause and agree as follows:

1.

On October 15, 1999, as a result of an inspection performed on June 16, 1999, Respondent was contacted by Complainant and notified of the following violation(s):

A. The facility has not complied with design and operating requirements that require drip pads to have a curb or berm around the perimeter which represents a violation of 40 CFR 265.443 (a)(3). The end of the drip pad where trams are brought onto the drip pad does not have a curb or berm.

B. The facility has not complied with the requirement to include the address of the emergency coordinator in the contingency plan which represents a violation of 40 CFR 265.52(d).

C. The Kerr McGee Contingency plan does not include the location of all emergency equipment at the facility and does not provide a brief outline of safety equipment capabilities. This represents a violation of 40 CFR 265.52(e).

D. The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content and the 216,000 gallons of fuel oil usage in any consecutive 12 month period for emission point AA-001, the 34 MMBTU/HR Cleaver Brooks D-6 Primary Boiler. Facility failed to monitor and document fuel oil usage each day and failed to calculate daily the total fuel oil usage of the current calendar year. The facility failed to maintain these records at the facility. These failures represent violations on of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

E. The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content for emission point AA-028, the 11.7 MMBTU/HR natural gas or fuel oil fired, Cleaver Brooks Boiler. The facility failed to record and maintain records of the amounts of each fuel combusted during each day. These failures represent violations of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12,

1998, and of the New Source Performance Standards 40 CFR 60.48c(g).

F. The facility failed to notify the Mississippi Department of Environmental Quality (MDEQ) of the actual date of the initial startup for emission point AA-028. This is a violation of 40 CFR 60.7 (a)(3) and a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998. The facility also failed to notify MDEQ of the date maximum production was reached for emission point AA-028. This is a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

2.

In lieu of a formal enforcement hearing concerning the violation(s) specifically listed above, Complainant and Respondent agree to settle this matter as follows:

A. Respondent agrees to pay and Complainant agrees to accept a monetary penalty in the amount of $ 12,500.00 as full and complete settlement for the matters addressed herein. This penalty shall be paid by Respondent to MDEQ within thirty (30) days of the issuance of this Agreed Order in the form of a certified check or money order.

B. Respondent shall complete installation and begin utilizing a curb or berm at the end of the drip pad in accordance with 40 CFR 265.443 (a)(3) within nine months (9) months of the date of this Agreed Order.

C. Within thirty (30) days after completion of the

installation and utilization of the curb or berm referenced in 2.B. , Respondent shall provide written notification to the Office of Pollution Control certifying that the requirements of 40 CFR 265.443(a)(3) have been meet.

D. Within thirty (30) days of the issuance of this Agreed Order, Respondent shall revise the facility contingency plan to include the address of the emergency coordinator as required by 40 CFR 265.52(d) and to include a brief outline of safety equipment capabilities and the location of all emergency equipment as required by 40 CFR 265.52(e).

E. Within thirty (30) days of the issuance of this Agreed Order, Respondent shall submit a report demonstrating compliance with the monitoring and record keeping requirements for emission point AA-028 and emission point AA-001, of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

3.

Nothing in this Agreed Order shall limit the rights of the Mississippi Department of Environmental Quality or the Mississippi Commission on Environmental Quality in the event Respondent fails to comply with this Agreed Order. The Agreed Order shall be strictly construed to apply to those matters expressly resolved herein.

4.

Nothing contained in this Agreed Order shall limit the rights of Complainant to take enforcement or other actions

against Respondent for violations not addressed herein and for future violations of environmental laws, rules, and regulations.

5.

Respondent understands and acknowledges that it is entitled to an evidentiary hearing before the Commission pursuant to Miss. Code Ann. Section 49-17-31 (Rev. 1999), and that it has made an informed waiver of that right.

ORDERED, this the _____ day of _____, 2000.

MISSISSIPPI COMMISSION ON
ENVIRONMENTAL QUALITY

BY: _____
CHARLES H. CHISOLM
EXECUTIVE DIRECTOR
MISSISSIPPI DEPARTMENT
OF ENVIRONMENTAL QUALITY

AGREED, this the _____ day of _____, 2000.

BY: _____

TITLE: _____

STATE OF _____

COUNTY OF _____

PERSONALLY appeared before me, the undersigned authority in

and for the jurisdiction aforesaid, the within named _____ who first being duly sworn, did state upon his/her oath and acknowledge to me that he/she is the _____ of _____ and is authorized by that Corporation to sign this Agreement.

_____

SWORN TO AND SUBSCRIBED BEFORE ME, this the _____ day of _____ 2000.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES:

_____

AGENDA

MEETING WITH KERR-McGEE CHEMICAL LLC

AND MISSISSIPPI DEQ

April 14, 2000

I. Introduction

AWPI.ORG
Dr. George Parris

II. Drip Pad Berm Issue

III. Address of Emergency Coordinator
265.52(d) - office + home is given after phone # only, not address.

IV. Emergency Equipment Location
They will reference Emerg. Resp. Plan in Cont. Plan

V. Fuel Usage of 34 MMBTU Boiler

VI. Fuel Usage of 11.7 MMBTU Boiler

VII. Initial Startup of emission point AA-028

VIII. Options

IX. Environmental Conference

5/10 Ramada Inn Airport
Call Steve about speakers, + email presentation

Lowndes

ENTERED BY: ZMB

DATE: 04/25/2000

HAZARDOUS WASTE DIVISION
RCRIS CM&E EVALUATION

Facility ID: MSD990866329 Date: 2-9-00

Facility Name: Kerr McGee Chemical Corporation

Evaluation Data: New__ Change__ Delete__

NOV sent on 10-27-99

Evaluating Agency: State

Evaluating Person: Kirk Shelton

Date of Evaluation: 6/16/99 (M/D/Y)

TYPE OF EVALUATION

- X CEI - Compliance Evaluation Inspection
- ___ CME - Compliance (Groundwater) Monitoring Evaluation
- ___ FRR - Financial Record Review
- ___ NRR - Non-financial Record Review
- ___ OAM - Operation & Maintenance Inspection
- ___ CSE - Compliance Schedule Evaluation
- ___ CDI - Case Development Inspection
- ___ SPL - Sampling Inspection(often in conjunction with CES/CMS)
- ___ CAO - Corrective Action Activities
- ___ OTH - Other

ONLY USE IF THERE ARE VIOLATIONS

- X SNY - Significant Non-Complier Yes
- ___ SNN - Significant Non-Complier No

COVERAGE AREAS: (X) E=Evaluated, BLANK = Not Applicable

TSD FACILITIES

E		E	
___	DCH - Chemical/Physical/Biological	___	DSI - Surface Impoundments
X	DCL - Closure/Post-Closure	___	DTR - Waste Tanks
X	DCP - Contingency Plan	___	DTT - Thermal Treatment
X	DFR - Financial Responsibility	___	DWP - Waste Pile
X	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 Resid
X	DLB - Land Ban	___	BPS - BIF Permit Standards
___	DLT - Land Treatment	___	BIS - BIF Interim Status Standards
X	DMC - Container Management	___	BCE - BIF Stds to Control Emissions
X	DMR - Manifest	___	BDT - BIF Stds for Direct Transfer
___	DOR - Other Requirements	___	DIA - Incinerator Waste Analysis
___	DOT - Other Requirements (Oversight)	___	DPS - Incinerator Performance Standard
___	DPB - Part B Permit Application	___	DOP - Incinerator Operating Requiremen
X	DPP - Preparedness Prevention	___	DMI - Incinerator Monitoring & Inspectio

GENERATOR FACILITIES

E		E	
X	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, Annual/Biennual HW Report)		

TRANSPORTERS

E		E	
___	TGR - General Standards	___	TWD - HW Discharges
___	TMR - Manifest	___	TRR - All Requirements
___	TOR - Other Requirements		

Lowndes

ENTERED BY: JMB

DATE: 04/25/2000

HAZARDOUS WASTE DIVISION
RCRIS CM&E EVALUATION

Facility ID: MSD990866329 Date: 2-9-00

Facility Name: Kerr McGee Chemical Corporation

Evaluation Data: New__ Change__ Delete__

NOV sent on 10-27-99

Evaluating Agency: State

Evaluating Person: Kirk Shelton

Date of Evaluation: 6 / 16 / 99 (M/D/Y)

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ONLY USE IF THERE ARE VIOLATIONS

- X SNY - Significant Non-Complier Yes
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COVERAGE AREAS: (X) E=Evaluated, BLANK = Not Applicable

TSD FACILITIES

E		E	
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GENERATOR FACILITIES

E		E	
X	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, Annual/Biennual HW Report)		

TRANSPORTERS

E		E	
___	TGR - General Standards	___	TWD - HW Discharges
___	TMR - Manifest	___	TRR - All Requirements
___	TOR - Other Requirements		

LOWNDES CO., HAZ. WASTES, GENERATOR, CLH
(Manila file)
Complain

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

December 1, 1999

Mr. Kirk Shelton
Compliance Division
Mississippi Department of Environmental Quality
PO Box 10385
Jackson, MS 39289-0385

Re: Notice of Alleged Violations, Kerr-McGee Chemical LLC
Columbus, Mississippi Creosote Wood Preserving Facility
EPA I.D. No. MSD990866329

Dear Mr. Shelton:

The Kerr-McGee Chemical LLC (KMCLLC) facility in Columbus, Mississippi received the Notice of Alleged Violations correspondence from the Mississippi Department of Environmental Quality (MDEQ) on November 1, 1999. The Notice of Violation is pursuant to a joint USEPA/ MDEQ multimedia inspection conducted at the facility on June 16, 1999.

The MDEQ cited nine areas of alleged violation. The attachment provides written responses addressing each alleged violation. Based upon the attached responses, KMCLLC does not believe there is sufficient basis for MDEQ to issue a notice of violation at our Columbus, Mississippi wood preserving facility.

KMCLLC desires to meet with the department at their earliest convince to discuss all alleged violations. We believe many of the alleged violations cited by MDEQ may be clarified through additional information.

Should you or any member of your staff have any questions, please telephone me at (405) 270-2625 or email me at sladner@kmg.com.

Sincerely,

KERR-MCGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Steve Ladner
Staff Environmental Specialist

cc: R. P. Murphey, Facility
N. E. Bock, KMCLLC

Forest Products

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

September 2, 1999

Mr. Kirk Shelton
Mississippi Department of Environmental Quality
Office of Pollution Control
P.O. Box 10385
Jackson, MS 39289-0385

Re: Requested Information for EPA Inspection Report
Kerr-McGee Chemical LLC - Forest Products Division
Columbus, Mississippi

Dear Mr. Shelton:

We appreciate your time this morning as well as the time of Mr. Lee and Mr. Twitty and the opportunity to discuss the EPA Inspection Report. As per your request to help clarify some concerns raised by the EPA, I have enclosed the following information:

1) Drip Pad design specifications

2) A more detailed outline of the Post-closure Care issues discussed during the Annual RCRA training for the employees involved in Hazardous Waste Management at the Columbus facility.

3) A copy of the RCRA training outline from 1996 and a copy of the RCRA training presentation for the past two years verfiying that Post-closure Care is discussed in the RCRA training.

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

Sincerely,

KERR-McGEE CHEMICAL - LLC
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: N.E. Bock
R.P. Murphey

Lowndes County

KERR-McGEE CHEMICAL LLC
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

November 4, 1999

Mr. Kirk Shelton
Compliance Division
Mississippi Department of Environmental Quality
PO Box 10385
Jackson, Mississippi 39289-0385

Re: Extension for Responses to Notice of Violations
Kerr-McGee Chemical LLC
EPA ID No. MSD990866329
Columbus, Mississippi

Dear Mr. Shelton:

The Kerr-McGee Chemical LLC (KMC LLC) facility in Columbus, Mississippi received the Notice of Violations correspondence from the Mississippi Department of Environmental Quality (MissDEQ) on November 1, 1999. The deadline provided by the MissDEQ is November 15. 1999, KMC LLC is requesting an extension of two weeks to respond to the alleged NOV's. The extension would require KMC LLC responses to be submitted no later than November 29, 1999.

Please review this request, and if you have any further questions, please feel free to contact me Steve Ladner at (405) 270-2625. Thank you for your time and consideration in this matter.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Stephen A. Ladner

Stephen A. Ladner
Staff Environmental Specialist

cc: N.E. Bock
Ron Murphey, Plant Manager
Myron Cunningham, Esq
Russ McLean, EPA

FOREST PRODUCTS

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
James I. Palmer, Jr., Executive Director

October 27, 1999

Certified Mail No. P 411 701 098

FILE COPY

Mr. Ron Murphy, Plant Manager
Kerr McGee Chemical Corporation
2300 14th Avenue
Columbus, MS 39701

Dear Mr. Murphy:

Re: Notice of Violations
Kerr McGee Chemical Corporation
Air Permit No. 1680-00020
EPA ID No: MSD990866329
Pretreatment Permit No. MSP090021
Lowndes County-Columbus, MS KAS

An inspection performed by the Mississippi Department of Environmental Quality and the U.S. Environmental Protection Agency on June 16, 1999, and a recent file review have revealed the following apparent violations at the referenced facility:

(1) The facility has not complied with design and operating requirements that require drip pads to have a curb or berm around the perimeter which represents a violation of 40 CFR 265.443 (a)(3). The end of the drip pad where trams are brought onto the drip pad does not have a curb or berm.

(2) The facility has not complied with design and operating requirements which require that drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous constituents off the drip pad as a result of activities by personnel or equipment. There was a stain on the ground at the end of the drip pad where trams are brought onto and taken off the drip pad. This is a violation of 40 CFR 265.443(j).

(3) The facility has not complied with the requirement of 40 CFR 265.441 for annual certification of the existing drip pad integrity. Assessment of existing drip pad integrity requires that an assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modification necessary to achieve compliance with all of the standards of 264.443 of this subpart are complete. The record of this certification for 1997 was not found onsite during the inspection.

(4) The facility has not complied with the requirement to include the address of the emergency coordinator in the contingency plan which represents a violation of 40 CFR 265.52(d). It is required that the contingency plan must list the names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator and that this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in order in which they will assume responsibilities as alternates. The address for the emergency coordinator was not listed in the contingency plan.

(5) It is required that the contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. The list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities. The Kerr McGee Contingency plan does not include the location of all emergency equipment at the facility and does not provide a brief outline of safety equipment capabilities. This represents a violation of 40 CFR 265.52(e).

(6) The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content and the 216,000 gallons of fuel oil usage in any consecutive 12 month period for emission point AA-001, the 34 MMBTU/HR Cleaver Brooks D-6 Primary Boiler. Facility failed to monitor and document fuel oil usage each day and failed to calculate daily the total fuel oil usage of the current calendar year The facility failed to maintain these records at the facility. These failures represent violations of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

(7) The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content for emission point AA-028, the 11.7 MMBTU/HR natural gas or fuel oil fired, Cleaver Brooks Boiler. The facility failed to monitor and document fuel oil usage each day. The facility failed to maintain these records at the facility. These failures represent violations of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998. Failing to record and maintain records of the amounts of each fuel combusted during each day is also a violation of the New Source Performance Standards 40 CFR 60.48c (g).

(8) The facility failed to maintain a file for each storage vessel containing the name of the stored material, the estimated true vapor pressure, and the dates of storage for each material stored. This is a violation of Other Requirements of Part III, item 1, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

(9) The facility failed to notify MDEQ of the actual date of the initial startup for emission point AA-028. This is a violation of 40 CFR 60.7 (a)(3) and a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998. The facility also failed to notify MDEQ of the date maximum production was reached for emission point AA-028. This is a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

Also, during the RCRA review the description of training, documentation of training and the director's qualification were evaluated for 1996-1998. The last training took place on May 15, 1998. Training was scheduled for June 1999. During 1998, Samuel Clemens did not receive training as he had in previous years. In a meeting with Kerr McGee on September 2, 1999, the facility indicated Mr. Samuel Clemens was a second shift supervisor and that he did not have any Hazardous Waste Management responsibilities therefore training would not be required. Please submit additional information clarifying all job responsibilities of Mr. Clemens, as well as, an explanation of why Mr. Clemens has received past training.

The facility did not have RCRA financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the review. MDEQ recommends that financial assurance documentation be kept onsite at the facility.

Under RCRA, it is required that the contingency plan must include an evacuation plan for facility personnel where there is a possibility that an evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste fires). Kerr McGee maintains an evacuation plan in the Kerr McGee Emergency Response Plan. The plan meets all aspects of the above requirements. MDEQ requests Kerr McGee to include the evacuation plan in the Contingency Plan.

We request that you respond in writing by November 15, 1999, to these violations. This response should contain: (1) actions that have been taken to correct the violations, (2) schedule for correcting the violations, or (3) reasons that you believe the alleged violations did not exist.

The alleged violations outlined above will require enforcement action, including the levying of monetary penalties, to resolve. The Office of Pollution Control will recommend that a complaint be served and the matter scheduled for a commission hearing. If you wish to avoid a formal hearing, the opportunity exist for negotiating a settlement with the Office Staff. If you wish to avail yourself this opportunity, please contact us, as soon as possible, to set up a time and date for discussion of the matter.

For your review, we enclosed the Air, Water, and RCRA inspection reports.

If you have any questions, please contact me at (601) 961-5333.

Sincerely,

Kirk A. Shelton
Compliance Division

Enclosure:
cc: Mr. Steve Ladner, Kerr McGee
Mr. David Lee, MDEQ

MISSISSIPPI DEPARTMENT OF ENVIRONMENT QUALITY
RCRA INSPECTION REPORT
COMPLIANCE EVALUATION INSPECTION
KERR-MCGEE CHEMICAL CORPORATION
COLUMBUS, MISSISSIPPI

1. **Inspector and Author of Report**
   Kirk Shelton, Environmental Administrator
   Mississippi Office of Pollution Control (MOPC)

2. **Facility Information**
   Kerr-McGee Chemical Corporation (KMCC)
   Forest Products Division
   P.O. Box 906
   Columbus, Mississippi 39701
   MSD990866329

3. **Responsible Company Official**
   Ron Murphy, Kerr-McGee Chemical Corporation

4. **Inspection Participants**
   Ron Murphy, KMCC
   Chuck Swann, KMCC
   Mindy Gardner, Region IV EPA
   Kirk Shelton, MOPC

5. **Date and Time of Inspection**
   July 16, 1999, 8:30 a.m.- 6:00 p.m. CST.

6. **Applicable Requirements**
   Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 264, 265, 268, and 279 the facility's Hazardous Waste Post-Closure Permits No. HW -90-139-01.

7. **Facility Description**

The site now occupied by Kerr-McGee Chemical Corporation has been used as a wood treating facility since 1928. KMCC acquired the site in 1964 and continued to produce treated railroad ties, switch ties, crossings, and pilings using creosote as a preservative. Pentachlorophenol was also used as a preservative prior to 1976. The wood comes in green, is allowed to dry for a period of time, is graded and cut to size and treated in the cylinders. Treated wood is removed from the cylinders to the drip pad. After residual dripping has ceased, treated wood is transported to black tie storage.

The facility is permitted to conduct post-closure and groundwater corrective action activities. In June of 1986, KMCC certified closure of a two hazardous waste surface impoundments, an aeration basin and a sedimentation basin in which bottom sediment sludge from process wastewater accumulated. The surface impoundments were replaced by upgrading production process oil/water separators to recycle preservatives for re-application within the production process. The wastewater is then pumped to the wastewater treatment system which operates under a pretreatment permit and is discharged to the City of Columbus POTW.

The groundwater corrective action system consists of groundwater recovery wells and recovery trenches. Recovered groundwater is pumped to an above ground oil-water separator. After the separation process, the wastewater is sent through the facility wastewater treatment system and discharged to the POTW.

In 1988, KMCC installed a concrete drip pad to collect excess preservative drippage from treated wood after removal from the pressure cylinder. The drip pad operates under Part 265 Subpart W regulations.

The facility has two black tie storage areas. The smaller of the areas is located north of 14th Avenue and the larger area is located south of the 14th Avenue. The facility maintains a contingency plan at the facility for the remediation of incidental spills and drippage and these areas are therefore not subject to Part 265 Subpart W regulations.
The facility is a large quantity generator of hazardous waste. The facility maintains a less than 90 day container storage area for drum storage. The drums contained F034 waste.

A post closure permit was issued in September 1990. On August 1,1995, the post closure permit was modified and issued along with the HSWA portion of the facility's RCRA Permit. Both these permits expire August 1, 2005.

Findings

The regulated units at the facility were visually inspected. The closed surface impoundment area appeared to be in good condition with no sign of erosion of the cover. The fence surrounding the closed impoundment was locked and danger signs were posted.

The ninety day storage contained twenty-four (24) fifty-five (55) gallon drums of F034 waste. All drums were dated and labeled as required. All drums were closed and in good condition. All drums had been in storage less than ninety days.

The drip pad was installed in 1988. In December of 1991, the drip pad was certified by a professional engineer. The drip pad on the north and south side has a four (4) inch curb above the surface of the drip pad. There were cracks on the surface of the curbs but appeared not to be cracks that could cause hazardous waste to be released from the drip pad. There is no curb above the drip pad surface at the end of the drip pad. The drip pad is sloped toward the treatment cylinder containment area. All drippage and wastewater from this area is hard-piped to the treatment area. The Drip Pad Precipitation and wash water from the pad drains to a sump. There are drains along the pad and in the treatment cylinder containment area. The water is then pumped to the wastewater treatment system. The drip pad is pressure washed and manually cleaned weekly. A graveled surface surrounds the drip pad. Stains were noted on the drip pad and just off the end of the drip pad on the graveled surface.

The following violations were noted from the drip pad evaluation:

(1) **It appears the facility has not complied with design and operating requirements which require drip pads to have a curb or berm around the perimeter. This is a violation of 40 CFR 265.443 (a)(3).**

(2) **It appears the facility has not complied with design and operating requirements which require that drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous constituents off the drip pad as a result of activities by personnel or equipment. This is a violation of 40 CFR 265.443(j).**

During the inspection the following records were reviewed.

- Manifest for 1996-1999;
- Financial assurance;
- Job titles and job descriptions;
- Training Records;
- Container storage area inspection records for 1997-1999;
- Closed surface impoundment inspection records for 1996-1999;
- Drip Pad assessment, clean-up and inspection records for 1996 through 1999;
- Waste Minimization Plan;
- Waste Analysis Plan;
- Notifications; and
- The Contingency Plan.

The following discussion addresses problems and violations found during the records review.

(1) The facility did not have financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the review.

MDEQ recommends that financial assurance documentation be kept onsite at the facility.

(2) A description of training, documentation of training and the directors's qualification were reviewed for 1996-1998. The last training took place on May 15, 1998. Training was scheduled for June 1999. During 1998 Samuel Clemens did not receive training.

It appears the facility has failed to meet the requirement to assure facility personnel has taken part in an annual review of required initial training. This is a violation of 40 CFR 265.16(c). However, in a meeting with Kerr McGee on September 2, 1999, the facility indicated Mr. Samuel Clemens was a second shift supervisor and he did not have any Hazardous Waste Management responsibilities therefore training would not be required. Additional information must be submitted by the facility describing all job responsibilities of Mr. Clemens, as well as, an explanation of why Mr. Clemens has received past training.

(3) Permit condition II.D requires that personnel training follow the attached outline, Permit Attachment II-1. The attachment specifically requires review of the Post Closure Care Plan, Permit Attachment III-1.

After the inspection, Kerr McGee provided MDEQ with copies of the Kerr McGee RCRA annual training outline for 1996, 1997 and 1998. Post Closure Care was addressed in the outline of each of these annual training sessions.

(4) Under the requirements for Accumulation time the facility is required to maintain a description of procedures that will be followed to ensure that all wastes are removed from the pad and the associated collection system at least once every 90 days.

After the inspection, Kerr McGee provided MDEQ with a copy of the drip pad and collection system/environmental procedures from the facility emergency response plan with an effective date of 10/01/96. This document addresses the inspections, cleaning of the pad, waste removal, emergency response, stormwater collection, and annual certification.

(5) Assessment of existing drip pad integrity requires that an assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modification necessary to achieve compliance with all of the standards of 264.443 of this subpart are complete. The record of this certification was not found during the inspection.

It appears the facility has failed to meet the requirement of 40 CFR 265.441 for annual certification of the existing drip pad integrity.

(6) The facility had a Spill Prevention Control and Countermeasures Plan (SPCC Plan), dated October 22, 1998, and a contingency plan, dated January 1996. It is required that the contingency plan must list the names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator and that this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in order in which they will assume responsibilities as alternates.

The Kerr McGee Contingency Plan does not include the addresses of emergency coordinators. This represents a violation of 40 CFR 265.52(d)

(7) It is required that the contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. The list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

The Kerr McGee Contingency plan does not include the location of all emergency equipment at the facility and does not provide a brief outline of safety equipment capabilities. This represents a violation of 40 CFR 265.52(e).

(8) It is required that the contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste fires).

The evacuation plan is contained in the Kerr McGee Emergency Response Plan. The plan meets all aspects of the above requirements. MDEQ request Kerr McGee to include the evacuation plan in the Contingency Plan as required.

(9) The requirements of Subpart W are not applicable to the management of infrequent and incidental drippage in the storage yard provided that the owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum the contingency plan must describe how the facility will do the following:
(i) Clean up the drippage;
(ii) Document the cleanup of the drippage;
(iii) Retain documents regarding cleanup for three years; and
(iv) Manage the contaminated media in a manner consistent with Federal regulations.

The facility has a contingency plan for cleaning up incidental drippage. The cleanup is documented and maintained at the facility.

Signatures

10-27-99
Date

10/27/99
Date

October 21, 1999

Ms. Mindy Gardner, EPA Region IV
RCRA Enforcement and Compliance Branch
61 Forsyth Street
Atlanta, GA 30303-8960

Dear Ms. Gardner:

Re: RCRA Compliance Evaluation Inspection
Kerr McGee Chemical Corporation
EPA ID No: MSD 990 866 329
Lowndes County - Columbus, MS

On June 16, 1999, the Mississippi Department of Environmental Quality (MDEQ), along with the U.S. Environmental Protection Agency conducted a RCRA compliance evaluation inspection at Kerr McGee Chemical Corporation facility located at 2300 14th Avenue, Columbus, Mississippi. We have enclosed a copy of the MDEQ RCRA Inspection report, as well as, the Notice of Violation Letter which was sent to Kerr McGee Chemical Corporation as a result of the inspection.

The MDEQ RCRA inspection report does not reflect the same violations as the U.S. EPA Region IV RCRA inspection report. After reviewing information submitted by Kerr McGee Chemical Corporation since the June 16, 1999, inspection, MDEQ concluded that several RCRA violations sited in the EPA Region IV RCRA Inspection Report did not exist. The violation discrepancies are as follows:

1. MDEQ agrees with EPA that the facility has violated 265.443(a)(3) but does not conclude that Kerr McGee is illegally storing waste in violation of RCRA 3005.

2. EPA sited Kerr McGee in violation of 40 CFR 264.14 because the facility did not prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility. MDEQ concludes that the TSD portion of the facility is the closed surface impoundment which did have a fence surrounding it, gates that were locked and signs posted warning of danger. MDEQ does not agree that the generator portion of the facility must comply with 40 CFR 264.14 and therefore this was not sited in the MDEQ inspection report.

3. EPA cited Kerr McGee in violation of 40 CFR 265.16 (c) because an employee did not take part in an annual review of the initial training in the paragraph (a) of this section. In a meeting with Kerr McGee on September 2, 1999, the facility indicated Mr. Samuel Clemens was a second shift supervisor and he did not

have any Hazardous Waste Management responsibilities therefore training would not be required. MDEQ has not cited this as a violation and has asked the facility to submit additional information describing all job responsibilities of Mr. Clemens, as well as, an explanation of why Mr. Clemens has received past training.

4. EPA cited Kerr McGee in violation of Permit Condition II.D. for failing to include a post-closure care review in the annual training. After the inspection, Kerr McGee provided MDEQ with copies of the Kerr McGee RCRA annual training outline for 1996, 1997 and 1998. Post Closure Care was addressed in the outline of each of these annual training sessions therefore MDEQ did not cite a violation.

5. EPA cited Kerr McGee in violation 262.34(a)(iii) for failing to have a procedure for waste removal from the drip pad as required. After the inspection, Kerr McGee provided MDEQ with a copy of the drip pad and collection system/environmental procedures from the facility emergency response plan with an effective date of 10/01/96. This document addresses the inspections, cleaning of the pad, waste removal, emergency response, stormwater collection, and annual certification. Therefore, MDEQ did not cite this as a violation.

6. EPA cited Kerr McGee for failing to meet a condition for exemption from RCRA 3005 by failing to store hazardous waste in compliance with 40 CFR 265.440© as incorporated by 40 CFR 262.34(a)(iii). 40 CFR 265.440(c) requires the owner to maintain and comply with a contingency plan that describes how the owner or operator will respond to the discharge of infrequent and incidental drippage in the storage yard. After the inspection Kerr McGee provided MDEQ with a copy of the contingency plan. The contingency plan provides an adequate facility response for cleaning up drippage in the storage yard. MDEQ did not cite this as a violation.

MDEQ did cite Kerr McGee for one RCRA violation not included in the EPA Region IV RCRA Inspection Report. MDEQ concluded that the staining on the ground just off the end of the drip pad is a violation of 40 CFR 265.443 (j). It appears the facility has not complied with design and operating requirements which require that drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous constituents off the drip pad as a result of activities by personnel or equipment.

If you have any questions concerning this matter, please contact me at 601-961-5333 or Mr. David Lee at 601-961-5377.

Sincerely,

Kirk Shelton
Compliance and Enforcement Division

KAS:ks
cc: Mr. David Lee, MDEQ

October 15, 1999

Certified Mail No. P

Mr. Ron Murphy, Plant Manager
Kerr McGee Chemical Corporation
2300 14th Avenue
Columbus, MS 39701

Dear Mr. Murphy:

Re: Notice of Violations
Kerr McGee Chemical Corporation
Air Permit No. 1680-00020
EPA ID No: MSD990866329
Pretreatment Permit No. MSP090021
Lowndes County-Columbus, MS

An inspection performed by the Mississippi Department of Environmental Qaulity and the U.S. Environmental Protection Agency on June 16, 1999, and a recent file review have revealed the following apparent violations at the referenced facility:

(1) The facility has not complied with design and operating requirements that require drip pads to have a curb or berm around the perimeter which represents a violation of 40 CFR 265.443 (a)(3). The end of the drip pad where trams are brought onto the drip pad does not have a curb or berm.

(2) The facility has not complied with design and operating requirements which require that drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous constituents off the drip pad as a result of activities by personnel or equipment. There was a stain on the ground at the end of the drip pad where trams are brought onto and taken off the drip pad. This is a violation of 40 CFR 265.443(j).

(3) The facility has not complied with the requirement of 40 CFR 265.441 for annual certification of the existing drip pad integrity. Assessment of existing drip pad integrity requires that an assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modification necessary to achieve compliance with all of the standards of 264.443 of this subpart are complete. The record of this certification for 1997 was not found onsite during the inspection.

(4) The facility has not complied with the requirement to include the address of the emergency coordinator in the contingency plan which represents a violation of 40 CFR 265.52(d). It is required that the contingency plan must list the names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator and that this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in order in which they will assume responsibilities as alternates. The address for the emergency coordinator was not listed in the contingency plan.

(5) It is required that the contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. The list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities. The Kerr McGee Contingency plan does not include the location of all emergency equipment at the facility and does not provide a brief outline of safety equipment capabilities. This represents a violation of 40 CFR 265.52(e).

(6) The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content and the 216,000 gallons of fuel oil usage in any consecutive 12 month period for emission point AA-001, the 34 MMBTU/HR Cleaver Brooks D-6 Primary Boiler. Facility failed to monitor and document fuel oil usage each day and failed to calculate daily the total fuel oil usage of the current calendar year The facility failed to maintain these records at the facility. These failures represent violations on of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

(7) The facility was unable to demonstrate compliance with the fuel usage limitations of 0.5% maximum sulfur content for emission point AA-028, the 11.7 MMBTU/HR natural gas or fuel oil fired, Cleaver Brooks Boiler. The facility failed to monitor and document fuel oil usage each day. The facility failed to maintain these record at the facility. These failures represent violations of Emission Limitations and Monitoring Requirements of Part II, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998. Failing to record and maintain records of the amounts of each fuel combusted during each day is also a violation of the New Source Performance Standards 40 CFR 60.48c (g).

(8) The facility failed to maintain a file for each storage vessel containing the name of the stored material, the estimated true vapor pressure, and the dates of storage for each material stored. This is a violation of Other Requirements of Part III, item 1, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

(9) The facility failed to notify MDEQ of the actual date of the initial startup for emission point AA-028. This is a violation of 40 CFR 60.7 (a)(3) and a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998. The facility also failed to notify MDEQ of the date maximum production was reached for emission point AA-028. This is a violation of Other Requirements of Part III, item 3, of the Synthetic Minor Operating Permit issued on June 6, 1997, and modified on June 12, 1998.

Also, during the RCRA review the description of training, documentation of training and the directors's qualification were evaluated for 1996-1998. The last training took place on May 15, 1998. Training was scheduled for June 1999. During 1998, Samuel Clemens did not receive training as he had in previous years. In a meeting with Kerr McGee on September 2, 1999, the facility indicated Mr. Samuel Clemens was a second shift supervisor and that he did not have any Hazardous Waste Management responsibilities therefore training would not be required. Please submit additional information clarifying all job responsibilities of Mr. Clemens, as well as, an explanation of why Mr. Clemens has received past training.

The facility did not have RCRA financial assurance documentation immediately available. However, this information was faxed from Kerr McGee headquarters during the review. MDEQ recommends that financial assurance documentation be kept onsite at the facility.

Under RCRA, it is required that the contingency plan must include an evacuation plan for facility personnel where there is a possibility that an evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste fires). Kerr McGee maintains an evacuation plan in the Kerr McGee Emergency Response Plan. The plan meets all aspects of the above requirements. MDEQ request Kerr McGee to include the evacuation plan in the Contingency Plan.

We request that you respond in writing by November 15, 1999, to these violations. This response should contain: (1) actions that have been taken to correct the violations, (2) schedule for correcting the violations, or (3) reasons that you believe the alleged violations did not exist.

The alleged violations outlined above will require enforcement action, including the levying of monetary penalties, to resolve. The Office of Pollution Control will recommend that a complaint be served and the matter scheduled for a commission hearing. If you wish to avoid a formal hearing, the opportunity exist for negotiating a settlement with the Office Staff. If you wish to avail yourself this opportunity, please contact us, as soon as possible, to set up a time and date for discussion of the matter.

If you have any questions, please contact me at (601) 961-5333.

Sincerely,

Kirk A. Shelton
Compliance Division

Enclosure:
cc: Mr. Steve Ladner, Kerr McGee
Mr. David Lee, MDEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

AUG 27 1999

4WD-RCRA

Don Watts, Chief
Environmental Compliance and Enforcement Division
Office of Pollution Control
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, Mississippi 39285-0385

SUBJ: RCRA Compliance Evaluation Inspection
Kerr McGee Chemical Corporation, Columbus, Mississippi
MSD 990 866 329 KAS Lowndes County

Dear Mr. Watts:

On June 16, 1999, a Compliance Evaluation Inspection was conducted by the United States Environmental Protection Agency (EPA) and the Mississippi Department of Environmental Quality (MDEQ) at the Kerr McGee Chemical Corporation facility located in Columbus, Mississippi, at 2300 14th Avenue, to determine the facility's compliance status with RCRA.

Enclosed is the EPA RCRA Site Inspection Report which indicates that violations of RCRA were discovered. Pursuant to the EPA - MDEQ Memorandum of Agreement, MDEQ is the lead agency for enforcement of the violations discovered during this inspection.

Pursuant to the 1996 Hazardous Waste Civil Enforcement Response Policy (ERP), Day 0 is the date of the inspection referenced above. Based upon the violations discovered during the referenced inspection, the facility is determined to be a Significant Non-Complier (SNC). Therefore, formal action is mandatory pursuant to the time frames outlined in the ERP.

If you have any questions, please contact Mindy M. Gardner, of my staff, at (404) 562-8594.

Sincerely yours,

Jeffrey T. Pallas, Chief
South RCRA Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

Enclosure

cc w/o encl: David Lee, MDEQ
Kirk Shelton, MDEQ

Lowndes County Hazwaste File

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

RECEIVED
AUG 31 1999
Dept. of Environmental Quality
Office of Pollution Control

4WD-RCRA

AUG 27 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ronald Murphy, Plant Manager
Kerr McGee Chemical Corporation
2300 14th Avenue
Columbus, Mississippi 39701

SUBJ: RCRA Compliance Evaluation Inspection
Kerr McGee Chemical Corporation
EPA ID No: MSD 990 866 329

Dear Mr. Murphy:

On June 16, 1999 , the U.S. Environmental Protection Agency (EPA), along with the Mississippi Department of Environmental Quality (MDEQ), conducted a RCRA compliance evaluation inspection at the Kerr McGee Chemical Corporation facility located in Columbus, Mississippi, at 2300 14th Avenue, in order to determine its compliance status with RCRA.

Enclosed is the EPA RCRA Site Inspection Report which indicates that violations of RCRA were discovered. A copy of this report has also been forwarded to MDEQ. Pursuant to the EPA - MDEQ Memorandum of Agreement, MDEQ is the lead agency for any potential enforcement action which may result from the RCRA violations cited in the report.

If you have any questions concerning the inspection report, please contact Mindy M. Gardner, of my staff, at (404) 562-8594.

Sincerely,

Jeffrey T. Pallas, Chief
South RCRA Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

Enclosure

cc w/o encl: David Lee, MDEQ
Kirk Shelton, MDEQ

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

August 30, 1999

Mr. Johnny Biggert
Bureau of Land and Water Resources
P.O. Box 10631
Jackson, Mississippi 39209
601/961-5210

Re: Kerr-McGee Chemical Corporation –LLC
Columbus Mississippi Facility
Monitor Well Plugging

Dear Mr. Biggert,

Kerr-McGee Chemical Corporation plugged and abandoned seven groundwater monitor wells in July 1999. Attached are the decommissioning forms and a location map for these wells. Feel free to contact me if you have further questions regarding the matter.

Sincerely,

Jami Poor, R.G.
Staff Hydrologist

CC: B. Ferguson- MDEQ
S. Ladner
T. Reed
C. Swann

File
Kerr-McGee
Lowndes County
MSD990866329
yellow label file

Forest Products

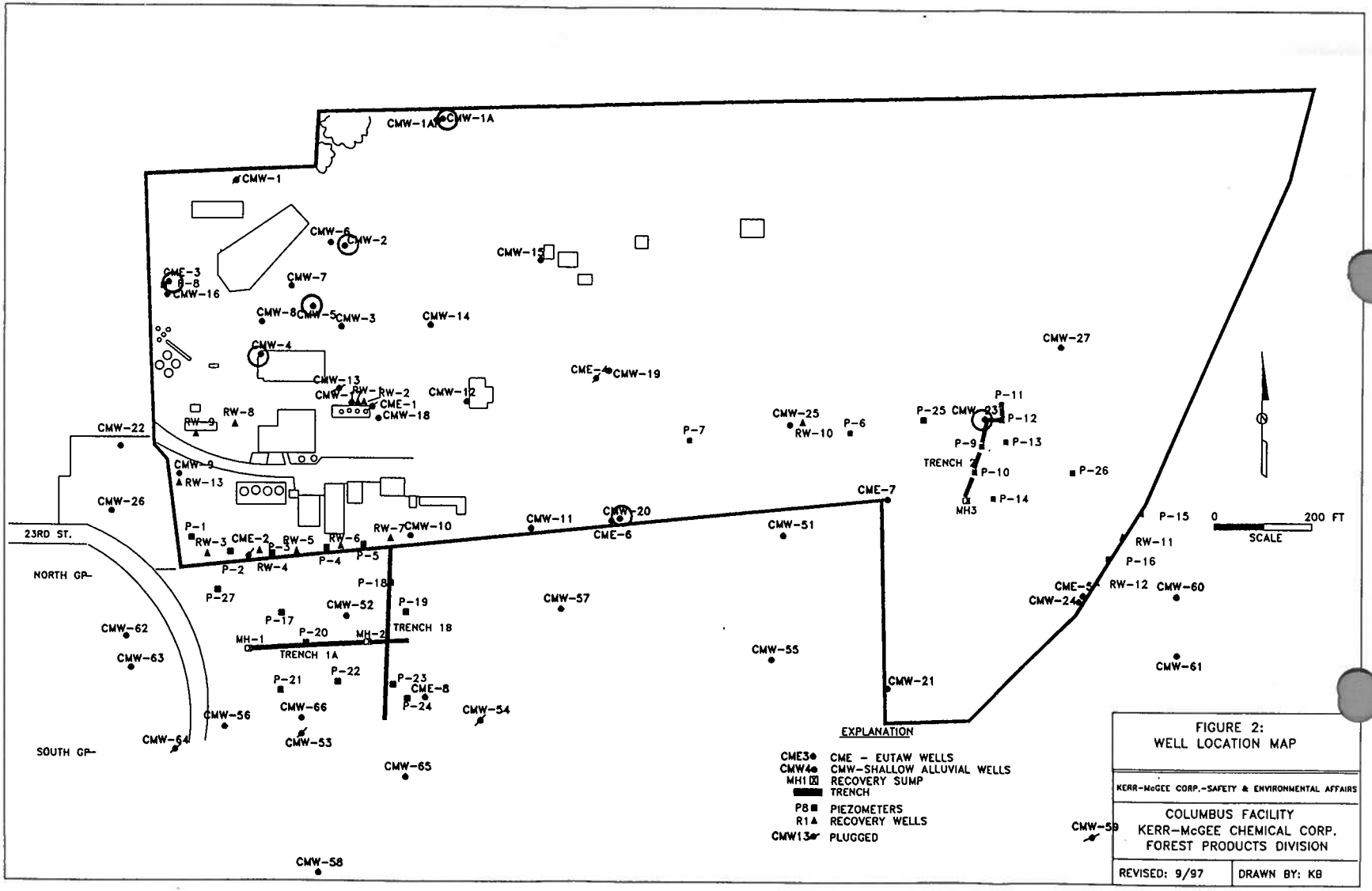


FIGURE 2:
WELL LOCATION MAP

KERR-McGEE CORP.-SAFETY & ENVIRONMENTAL AFFAIRS

COLUMBUS FACILITY
KERR-McGEE CHEMICAL CORP.
FOREST PRODUCTS DIVISION

REVISED: 9/97 | DRAWN BY: KB

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co	
WELL NUMBER: CMW1A	CODED:
DATE WELL PLUGGED: 7/12/99	
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS Inc	
Knoxville, Al	

NAME & MAILING ADDRESS OF LANDOWNER: Kerr-McGee Chemical LLC	
2300 14th Ave 20th St. N.	
Columbus Mississippi	
WELL LOCATION: SE SW	SEC: 10 TOWNSHIP: 18S RANGE: 18W
DISTANCE:	DIRECTION: NEAREST TOWN: Columbus
OTHER LANDMARK:	
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.: Groundwater monitoring	

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL: TTL, Inc	
Tuscaloosa, Al	
NAME OF LANDOWNER WHEN WELL WAS DRILLED: Kerr-McGee Chemical	
WELL DATA	
Well Depth: 18.0'	Casing Diameter (In.): 3" Casing Length (Ft.): 20.52
Type of Casing: PVC	Hole Depth: 18' Depth to Static Water Level: 5.7
DATE WELL COMPLETED: 6/13/84	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Protective Box & Concrete Pad were removed.

PVC casing pulled. Auger to removed sand pack to 18.0'. Tremie cement/ bentonite grout from 18.0 to 1/2' below surface.

Soil was placed to grade.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Poor RPG #0476 — SIGNATURE

8/2/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co.	
WELL NUMBER: CMW2	CODED:
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS, Inc	
DATE WELL PLUGGED: 7/12/99	Knoxville, AL

NAME & MAILING ADDRESS OF LANDOWNER: Keer-McGee Chemical LLC	NAME OF WELL CONTRACTOR WHO DRILLED THE WELL: TTL, Inc.
2300 14th Ave & 20th St. N.	Tuscaloosa, AL
Columbus Mississippi	NAME OF LANDOWNER WHEN WELL WAS DRILLED: Kerr-McGee Chemical
WELL LOCATION: SE SW 10 — SEC: 10 — TOWNSHIP: 18S — RANGE: 18W	WELL DATA
DISTANCE: — DIRECTION: — NEAREST TOWN: Columbus	Well Depth: 25.0 — Casing Diameter (In.): 4" — Casing Length (Ft.): 28.22
OTHER LANDMARK:	Type of Casing: PVC — Hole Depth: 25.0' — Depth to Static Water Level: 3.4
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.: Groundwater monitoring	DATE WELL COMPLETED: 6/25/81

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)

Protective box, concrete pad removed and 4 protective posts surrounding were removed. Impacted surfaced soils noted to approx 5'. Did not want to auger to total well depth and to bring contaminants deeper therefore pulled casing 1', broke the casing bottom & used casing as tremie line as casing was slowly pulled. Sand pack was not drilled out but casing was removed and well was grouted using cement/betonite mix from 5' below surface. Soil placed on Surface.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Poor RPG #0476 — SIGNATURE

8/2/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co.	
WELL NUMBER: CMW4	CODED:
DATE WELL PLUGGED: 7/13/99	
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS, Inc.	
Knoxville, Al	

NAME & MAILING ADDRESS OF LANDOWNER: Kerr-McGee Chemical LLC	
2300 14th Ave 20th St. N.	
Columbus Mississippi	
WELL LOCATION: SE SW	SEC: 10
TOWNSHIP: 18S	RANGE: 18W
DISTANCE:	DIRECTION:
NEAREST TOWN: Columbus	
OTHER LANDMARK:	
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.: Groundwater monitoring	

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL: TTL	
Tuscaloosa, Al	
NAME OF LANDOWNER WHEN WELL WAS DRILLED: Kerr-McGee Chemical	
WELL DATA	
Well Depth: 22.0'	Casing Diameter (In.): 4"
Casing Length (Ft.): 23.63	
Type of Casing: PVC	Hole Depth: 20.0
Depth to Static Water Level: 5.5	
DATE WELL COMPLETED: 6/25/81	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL DSED IN PLUGGING, ETC.)

Due to building expansion after this monitoring well was installed, this well is not accesible. Well casing was left intact. Pure gold grout was placed in casing in 4' lifts allowing the pellets to hydrate. Quick Crete powder was placed into the top 3' of the casing to form surface seal.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jason Poor RPG #0476 — SIGNATURE

7/12/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co	
WELL NUMBER: CMW5 / CODED:	PERMIT NUMBER: 0610
	NAME OF DRILLING FIRM: TDS, Inc.
DATE WELL PLUGGED: 7/12/98	Knoxville, Al

NAME & MAILING ADDRESS OF LANDOWNER: Kerr-McGee chemical LLC	NAME OF WELL CONTRACTOR WHO DRILLED THE WELL: TTL, INC.
2300 14th Ave. & 20th Str.N.	Tuscaloosa, AL
Columbus Mississippi	NAME OF LANDOWNER WHEN WELL WAS DRILLED: Kerr-McGee Chemical
WELL LOCATION: SESW / SEC: 10 / TOWNSHIP: 18S / RANGE: 18W	WELL DATA
DISTANCE: / DIRECTION: / NEAREST TOWN: Columbus	Well Depth: 27.5 / Casing Diameter (In.): 2' / Casing Length (Ft.): 27.5
OTHER LANDMARK:	Type of Casing: PVC / Hole Depth: 30.0 / Depth to Static Water Level: 2.1
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.: Groundwater monitoring	DATE WELL COMPLETED: 5/16/85

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)

Removed casing protector & well pad. Well has odor & has been impacted in the past. To prevent cross-contamination by augering to TD, break out bottom of casing & use it as tremie line to grout to surface. Cement/ bentonite mix place from 27.5' to 1/2' below the surface. Surface soils & gravels place to grade.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Cook RPG #1476 — SIGNATURE

8/2/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co	
WELL NUMBER: CMW20	CODED:
DATE WELL PLUGGED: 7/13/99	
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS, Inc.	
Knoxville, Al	

NAME & MAILING ADDRESS OF LANDOWNER	Kerr-McGee Chemical LLC 2300 14th Ave & 20Th Str. N. Columbus, Mississippi
WELL LOCATION: SE SW	SEC: 10 TOWNSHIP: 18S RANGE: 18W
DISTANCE / DIRECTION / NEAREST TOWN	Columbus
OTHER LANDMARK	
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.	Groundwater monitoring

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL	TTL, Inc. Tuscaloosa, AL
NAME OF LANDOWNER WHEN WELL WAS DRILLED	Kerr-McGee Chemical

WELL DATA

Well Depth	Casing Diameter (In.)	Casing Length (Ft.)
24.0	2"	27.0
Type of Casing	**Hole Depth**	**Depth to Static Water Level**
PVC	24.5	10.1

DATE WELL COMPLETED: 12/27/89

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)

Removed protective meter box, High voltage power line has been placed above well since well was installed. Unable to drill out material. Unable to pull casing using wench on front of drill rig, or with bob cat. Pressure pump cement/bentonite grout mixture into casing. Place soils to ground surface.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Poor RPG #0476 — SIGNATURE

8/2/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co.	
WELL NUMBER: CMW23	CODED:
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS, Inc.	
DATE WELL PLUGGED: 7/13/99	Knoxville, AL.

NAME & MAILING ADDRESS OF LANDOWNER: Kerr-McGee Chemical LLC 2300 14th Ave. & 20th Str. N. Columbus, Mississippi	NAME OF WELL CONTRACTOR WHO DRILLED THE WELL: TTL, Inc. Tuscaloosa, LA
WELL LOCATION: SWSE SEC: 10 TOWNSHIP: 18S RANGE: 18W	NAME OF LANDOWNER WHEN WELL WAS DRILLED: Kerr-McGee Chemical
DISTANCE: DIRECTION: NEAREST TOWN: Columbus	WELL DATA
OTHER LANDMARK:	Well Depth: 14.5 / Casing Diameter (In.): 2" / Casing Length (Ft.): 14.5
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.: Groundwater monitoring	Type of Casing: PVC / Hole Depth: 19.0 / Depth to Static Water Level: 8.1
	DATE WELL COMPLETED: 7/25/90

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)

Remove protective box & concrete pad. Auger out PVC casing and sand pack to 15.0 . Tremie cement/bentonite grout mix from 15' to 1/2' below surface, place native soils to grade.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Poor RPG #C476 — SIGNATURE

8/2/99 — DATE

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources

P. O. Box 10631
Jackson, Mississippi 39209
WATER WELL PLUGGING
DECOMMISSIONING

COUNTY WELL LOCATED: Lowndes Co	
WELL NUMBER: P8	CODED:
DATE WELL PLUGGED: 7/13/99	
PERMIT NUMBER: 0610	
NAME OF DRILLING FIRM: TDS	
Knoxville, AL	

NAME & MAILING ADDRESS OF LANDOWNER
Kerr-McGee Chemical LLC
2300 14th Ave & 20th St. N.
Columbus Mississippi

WELL LOCATION	SEC	TOWNSHIP	RANGE
SE SW	10	18S	18W

DISTANCE	DIRECTION	NEAREST TOWN
		Columbus Miss

OTHER LANDMARK

WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.
Grounwater Monitoring

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL
TTL, Inc
Tuscaloosa Alabama

NAME OF LANDOWNER WHEN WELL WAS DRILLED
Kerr-McGee Chemical

WELL DATA

Well Depth	Casing Diameter (In.)	Casing Length (Ft.)
39.0'	2"	39.23
Type of Casing	**Hole Depth**	**Depth to Static Water Level**
PVC	39.0'	4.7

DATE WELL COMPLETED: 11/14/90

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)

The protective box & concrete pad were removed.
well casing & sand pack were drilled out to depth of 39.5 feet
below surface. Bore hole tremied with cement/ bentonite grout
mix to 1/2' below surface.
Soil was placed to grade.

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Jami Cook RPG #0476 — SIGNATURE

8/2/99 — DATE

FILE COPY

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

May 19, 1999

Mr. Steve Ladner
Kerr-McGee Chemical, LLC
Forest Products Division
P. O. Box 25861
Oklahoma City, Oklahoma 73125

Dear Mr. Ladner:

Re: Kerr-McGee Chemical, LLC
Columbus, Lowndes County, Mississippi
MSD 990 866 329
1998 Semi-Annual Corrective Action
Evaluation and Groundwater Monitoring
Report – March 1, 1999

The Mississippi Office of Pollution Control has received and reviewed the above referenced report. The following comments are based on this review:

1. The report states that monitoring well CMW-1AR contained no K001 constituents above approved method detection limits. The analytical summary sheets contained in AppendixA show two samples labeled CMW-1AR that do show detects above the MDL. These samples are marked as "MS1" and "SD1." Please clarify the meaning of these sampling results.

2. The facility is required to sample for lead when conducting "Appendix IX sampling" as defined in Permit Condition I.D.3. The Appendix IX sampling results summarized in Appendix A of the report do not contain results for lead.

Please respond to the above comments within 30 days of receiving this letter. Should you have any questions, I can be reached at (601) 961-5141.

Sincerely,

Bruce Ferguson
Environmental Permits Division

cc: Mr. Russ McLean, U. S. EPA, Region 4
Mr. Kirk Shelton, MDEQ

OFFICE OF POLLUTION CONTROL
P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612

Kerr McGee Landfarm Site Co
RCRA Comp.

KERR-McGEE CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

February 25, 1999

Certified Mail – Return Receipt

Environmental Permitting Division, Chief
Mississippi Office of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39289-0385

Re: Annual Groundwater Monitoring Report
Kerr-McGee Chemical LLC
MSD 081 387 730
Meridian, MS

Dear Chief,

In accordance with the Kerr-McGee Chemical LLC Hazardous Waste Management Permit No. HW-88-730-01 for the closed facility in Meridian, Mississippi, we are submitting the annual groundwater monitoring report. The Permit requires reporting to the regulatory agency by September 1 and March 1 of each year.

The test for "significant evidence of a release" as required by Module III.F of the Permit shows that no significant evidence of a release has occurred.

KMC-LLC will conduct 1999 groundwater monitoring consistent with the September 1998 revisions to the facility's RCRA Permit. We anticipate RFI activities to commence this year.

Should you have any questions concerning this report, please don't hesitate to call me at (405) 270-3747.

Sincerely,

A. Keith Watson
Project Manager

cc: Bruce Ferguson – MDEQ
B. Harmon
R. Widmann

FILE COPY

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OK 73125

June 3, 1998

Mr. Bruce Ferguson
Environmental Engineer
Mississippi Department Environmental Quality
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Resampling of Groundwater Monitoring Well - CMW-24
Kerr-McGee Chemical - LLC
Columbus, Mississippi

Dear Mr. Ferguson:

Enclosed please find a copy of the analysis from 4/12/98 and the resampling analytical testing of CMW-24 for the presence of Arsenic and Chromium. As per our previous conversation, the original testing results received on 4/12/98 showed elevated levels of Arsenic and Chromium in this groundwater well. As agreed upon, KMC-LLC resampled this well for the presence of Arsenic and Chromium using the slow purge method. The results of this resampling effort show greatly reduced concentrations more in alignment with historical levels from previous sampling and analyses. KMC-LLC believes this data more accurately reflects the concentrations of these constituents in the groundwater and believes that the measurements from 4/12/98 were indeed an anomaly.

This correspondence will be included in the Annual Groundwater Report to maintain good records and to avoid confusion. Thank you for your time and consideration in this matter. If you have any further questions, please do not hesitate to call me, Steve Ladner at (405) 270-2625.

Sincerely,

KERR-McGEE CHEMCIAL-LLC
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: Ron Murphey, Columbus
N.E. Bock, KMC-LLC
T.R. Reed, KM Hydrology

Copy forwarded to Mindy Gardner & Russ McLean, US. EPA Region IV 6/9/98 BDJ

BF

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

April 22, 1998

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

Re: Kerr-McGee Chemical LLC -Forest Products Division
Columbus Mississippi Facility
Appendix IX Sampling Results: well CMW-24

Dear Mr. Ferguson:

Within the last week Kerr-McGee Chemical LLC - Forest Products Division (KMCLLC-FPD) received the results of the arsenic and chromium sampling conducted in compliance with annual requirements to analyze one effectiveness well for Appendix IX constituents. This year, monitor well CMW-24 was selected. The results indicate concentrations for both metals above the MCL's. KMCLLC believes that the elevated concentrations of arsenic and chromium are due to suspended sediment in the groundwater sample by virtue of the sampling procedure.

In conjunction with the approved permit guidelines in section IV.H.3.a., KMCLLC will resample CMW-24 for arsenic and chromium using a low-flow purging technique to minimize suspended sediment in the sample. This sampling will be performed within the time frame specified in the permit. The results of the metals analyses will be forwarded to you upon completion of the laboratory work.

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

Sincerely,

KERR-MCGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR
cc: Mr. Russ McClean, USEPA - Region IV
R. Murphey
T. Reed

Forest Products

SOUTHWEST LABORATORY
OF OKLAHOMA, INC.

April 13, 1998

Jami Poor
KERR MCGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION
123 Robert S. Kerr Avenue
Oklahoma City, OK 73102

Project: **KMCCFPDCOL97**
SWLO ID: **33265.01**

Dear Ms. Poor:

Enclosed please find the DMOL summary report, one bound and one unbound full report, and SWLO standard diskette deliverable for your sample originally received in our laboratory on November 20, 1997. A copy of the summary report has been forwarded to the Columbus, Mississippi office.

Per your March 20, 1998 request, we resubmitted one unpreserved container for analysis of arsenic and chromium. The sample container was acidified to <2 pH with nitric acid prior to sample digestion.

If, in your review, you should have any questions or require additional information, please do not hesitate to call.

Sincerely,

Randy Staggs
Project Officer

Enclosures

cc: facility manager (DMOL summary report)
Kerr McGee Corp.
2300 14th Ave. & 20th St. North
PO Box 906
Columbus, MS 39701

1700 WEST ALBANY • BROKEN ARROW, OK 74012-1421 • (918) 251-2858 • FAX (918) 251-2599

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Lab Number

DATE: 04/12/98
PAGE: 1

Client: KERR MCGEE CORPORATION

Project: KMCCFPDCOL97

Matrix: WATER	Sample Point->	GWMCMW24					
	Sample Date->	/ /					
	LAB#->	33265.01					
Parameters	Units						
METALS							
ARSENIC	ug/L	1050					
CHROMIUM	ug/L	247					

U: ANALYZED BUT NOT DETECTED
See enclosure for additional qualifiers

L3.9-00.100.0

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Lab Number

DATE: 05/28/98
PAGE: 1

Client: KERR MCGEE CORPORATION

Project: KMCCFPDCOL

Matrix: WATER	Sample Point->	CMW24		CMW24-FILTERED				
	Sample Date->	05/07/98		05/07/98				
	LAB#->	33896.01		33896.02				
Parameters	Units							
METALS ANALYSIS								
ARSENIC	ug/L	18.8		16.7				
CHROMIUM	ug/L	5	U	5	U			
MISCELLANEOUS								
FIELD CONDUCTIVITY	um/cm	100		-				
FIELD pH	s.u.	7.4		-				
FLOATERS	ft	0.28		-				
SINKERS	ft	0	U	-				

U: ANALYZED BUT NOT DETECTED
See enclosure for additional qualifiers

L3.9-00.100.0

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

March 23, 1998

Mr. Bruce Ferguson
Environmental Engineer
Mississippi Department of Environmental Quality
Office of Pollution Control
P.O. Box 10385
Jackson, MS 39289-0385

Re: 1997 Annual/Semi-Annual Corrective Action
Performance Evaluation and Groundwater Monitoring Report
Kerr-McGee Chemical LLC
Columbus, Mississippi

Dear Mr. Ferguson:

In response to the correspondence received by Kerr-McGee Chemical LLC on March 18, 1998 regarding the 1997 Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report from the Mississippi Department of Environmental Quality (MDEQ), KMC LLC has reviewed the two items: the apparent violation and the comment. These items were discussed on March 20, 1998 in our phone conversation and the following response was agreed upon.

MDEQ Item 1 - Permit Condition IV.C.3.e - One effectiveness well shall be sampled annually and analyzed for all Appendix IX parameters as defined in Permit Condition I.D.3. This condition does not exclude the constituents arsenic and chromium from the required Appendix IX monitoring list as stated on page 5 of the above referenced report.

KMC LLC response: On February 3, 1997, KMC LLC received notification from the MDEQ of approval of a permit modification incorporating the requirement to sample and analyze an effectiveness well on an annual basis. In compliance with this request, KMC LLC sampled effectiveness well CMW-24 for a preapproved list of Appendix IX constituents on November 19, 1997 issuing a report on January 9, 1998. Through a misunderstanding, the analysis did not include arsenic and chromium. However, after contacting the lab, KMC LLC discovered that the lab retains samples 90 days after the issuance of the analytical report. Therefore, the lab still has the original sample and will be able to analyze the sample utilizing method 6010 for the presence of arsenic and chromium. The holding time has not been exceeded. In the prepared report, the lab will itemize the preparation of the sample, and describe how the sample was analyzed.

Based on the facts that the sample will be within the annual time frame and that the analysis will occur from the original sample, KMC LLC believes that the apparent violation is not a violation of the Mississippi Hazardous Waste Management Permit No. HW-90-329-01, and that this action satisfies the concern. This opinion was verified during our phone conversation on Friday, March 20, 1998. Therefore, KMC LLC believes this action satisfies the permit requirements without violation.

Item 2 - Measured total depth for CMW-19 is 26.47 feet, actual constructed depth is 32.4 feet. Screened monitoring wells in the corrective action program that exceed 3 feet variance in completed versus measured depth will be redeveloped.

KMC LLC response: KMC LLC checks all wells for occlusion greater than 3 feet on an annual basis. KMC LLC will redevelop all wells showing greater than 3 feet of variance between measured and completed total depth during second quarter of 1998.

KMC LLC believes that the previous responses satisfy the concerns of the MDEQ and that all permit conditions have been met. If you have any additional questions, please feel free to contact me, Steve Ladner at (405) 270-2625. Thank you for your time and consideration in this matter.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Stephen A.Ladner
Staff Environmental Specialist

Cc: Ron Murphy, KMC LLC - Columbus
Tom Reed, KM Hydrology
Jami Poor, KM Hydrology
Nick Bock, KMC LLC

EPA Copied 3/27/98

FILE COPY

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
James I. Palmer, Jr., Executive Director

March 23, 1998

Mr. Steve Ladner
Kerr-McGee Chemical, LLC
P. O. Box 24861
Oklahoma City, OK 73125

Re: Administrative Order 1636-89
Kerr-McGee Chemical
Columbus, Mississippi

Dear Mr. Ladner:

Recently you requested documentation that the conditions of the above referenced order have been met and the matter has been settled. I have reviewed the Mississippi Office of Pollution Control files and found that the conditions of the order have been met.

Should you have any questions, please call me at (601) 961-5141.

Sincerely,

Bruce Ferguson
Environmental Permits Division

OFFICE OF POLLUTION CONTROL
P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612

MISSISSIPPI DEPARTMENT OF

James I. Palmer, Jr.,

March 16

Z 278 184 525

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to	
Street & Number	
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

Form 3800, April 1995

CERTIFIED MAIL NO. - Z 278 184 525
Mr. Steve Ladner
Kerr-McGee Chemical LLC
P. O. Box 25861
Oklahoma City, Oklahoma 73125

Re: 1997 Annual/Semi-Annual Corrective Action Performance Evaluation and Groundwater Monitoring Report
Kerr-McGee Chemical LLC
Columbus, Mississippi

Dear Mr. Ladner:

The Mississippi Office of Pollution Control (Office) has reviewed the above reference report. This review has revealed the following apparent violation of Mississippi Hazardous Waste Management Permit No. HW-90-329-01:

1. Permit Condition IV.C.3.e. - One effectiveness well shall be sampled annually and analyzed for all Appendix IX parameters as defined in Permit Condition I.D.3. This condition does not exclude the constituents arsenic and chromium from the required Appendix IX monitoring list as stated on page 5 of the above referenced report.

In addition to the apparent violation, the Office has the following comment on the above reference report:

2. The first page of Appendix B shows the measured total depth for CMW-19 to be 26.47 feet during the May 19, 1997 sampling event. This same page shows the constructed depth of CMW-19 to be 32.4 feet. Page 4 of "Sampling and Analysis Plan, Kerr-McGee Chemical Corporation Forest Products Division, Columbus, Mississippi, Revised May 31, 1996" states that screened monitor wells that are part of the groundwater corrective action program that show greater than a 3.0 foot difference from the original completed depth will be re-developed.

The Office requests that you respond to the apparent violation and comments within 10 days of receiving this letter. This response should contain: (1) actions that have been taken to correct the violation, (2) a schedule for correcting the violation, or (3) reasons that you believe the alleged violation did not exist. The alleged violation may require a penalty, including a multi-day penalty, under the RCRA Penalty Policy and should be corrected immediately; however, The Office of Pollution Control will review this information before determining if further action including a penalty is warranted. Section 17-17-29 of the Mississippi Code Annotated (Supp. 1991) allows assessments of penalties not more than $25,000 per day per violation. Failure to submit this information may result in enforcement action.

Should you have any questions, please contact me at (601) 961-5141.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

cc: Ron Murphy, KMCLLC

KERR-McGEE CHEMICAL CORPORATION
P.O. BOX 906 • COLUMBUS, MISSISSIPPI 39703-0906

January 23, 1998

Bruce Ferugson
Hazardous Waste Division
Office of Pollution Control
P. O. Box 10385
Jackson, MS 39289-0385

Re: Kerr-McGee Chemical Corporation Name Changed to Kerr-McGee Chemical LLC (Hazardous Waste Management Permit # HW-90-329-01)

Dear Mr. Ferguson:

This is to advise you that effective January 1, 1998, Kerr-McGee Chemical Corporation was included in an overall corporate reorganization and its name was changed to Kerr-McGee Chemical LLC.

This object of the reorganization is to make Kerr-McGee more competitive in its businesses through a more efficient corporate structure.

Kerr-McGee Chemical LLC operations are managed and directed by the same personnel that previously managed Kerr-McGee Chemical Corporation. Further, Kerr-McGee Chemical LLC continues to be 100% owned by Kerr-McGee Corporation just as Kerr-McGee Chemical Corporation was prior to the reorganization.

The above referenced permit has not been assigned, conveyed nor transferred. However, we are providing you this notification so that you may be prepared as our company letterhead changes over the course of the next year.

Should you have any questions please contact me directly at (601) 328-7551.

Sincerely,

KERR-McGEE CHEMICAL LLC
FOREST PRODUCTS DIVISION

Ronald P. Murphey

Ronald P. Murphey
Plant Manager

RPM/tjj

cc: N. E. Bock

Forest Products

KERR-McGEE CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

February 26, 1998

Certified Mail - Return Receipt

Mississippi Department of Environmental Quality
Office of Pollution Control
Attn: Mr. Charles Chisolm
P. O. Box 10385
Jackson, Mississippi 39289-0385

Re: Annual Groundwater Monitoring Report
Kerr-McGee Corporation
MSD 081 387 730
Meridian, MS

Dear Mr. Chisolm,

In accordance with the Kerr-McGee Chemical Corporation (KMCC) Hazardous Waste Management Permit No. HW-88-730-01 for the closed facility in Meridian, Mississippi, we are submitting the annual groundwater monitoring report. The Permit requires quarterly monitoring of certain site monitor wells, and data reporting to the regulatory agency by September 1 and March 1 of each year.

As the data shows, none of the four wells detected above the method detection limit (MDL) any of the five constituents required to be monitored (pentachlorophenol, 2,4-dinitrophenol, naphthalene, fluoranthene or acenaphtylene) during calendar year 1997. A statistical analysis of the data (required by Permit condition III.F.4) is meaningless because all data is below the method detection limits.

Beginning with third quarter 1994, KMCC has been sampling piezometers P-11 and P-16 per agreement with the MDEQ because of groundwater flow direction concerns raised by MDEQ. The attached summary tables include data from the two piezometers. Neither piezometer detected any creosote constituents in 1997.

Should you have any questions concerning this semi-annual report, please don't hesitate to call me at (405) 270-3747.

Sincerely,

A. Keith Watson
Project Manager

Enclosure

cc: Bruce Ferguson - MDEQ
R. Widmann
B. Harmon

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

September 29, 1997

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
1997 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 *1997 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 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 CORP.
FOREST PRODUCT DIVISION

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR

Enclosures

cc: R. Murphey
T. Reed

FOREST PRODUCTS

FILE COPY

MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

September 22, 1997

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

Re: Compliance Evaluation Inspection
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Ladner:

Please find enclosed an inspection report and checklist that was completed as a result of the above referenced inspection. This inspection revealed no apparent violation(s) of the Mississippi Hazardous Waste Management Regulations (MHWMR) nor of the Mississippi Hazardous Waste Permit No. HW-90-139-01.

If you have any questions, do not hesitate to contact me at (601) 961-5171.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

Enclosures
cc: Ms. Mindy Gardner, Compliance, U. S. EPA, Region 4

Complaint

Bruce Ferguson
02/14/97 01:45 PM

To: Milton Brumfield/SW/OPC/DEQ
cc: David Peacock/HW/OPC/DEQ
Subject: Decon Water
Kerr-McGee Chemical Corporation
Meridian, Mississippi

Does facility have to have an existing waste water permit to meet the exemption?

When sampling at a hazardous waste site, if it has been determined that the environmental medium to be sampled is itself a hazardous waste, exhibits a hazardous waste characteristic or "contains" a listed hazardous waste, then Subtitle C requirements apply to the residues (purge water, drill cuttings, drilling fluids, etc.) that are generated during the sampling event. The above referenced decon water contains the listed wastes F034 and F032. Although contaminated soil, water or other debris are considered hazardous wastes under this listing, if they are decontaminated, they no longer meet the listing and therefore are not a listed hazardous waste nor do they "contain" a listed hazardous waste. As can be seen in the table below, the decon water can not be considered decontaminated based on the submitted analytical results. The decon water must, therefore, be managed in accordance with the RCRA Subtitle C requirements.

Health Based Criteria vs. Submitted Analytical Results

Substance Name	CASRN	Health Based Criteria mg/l	Submitted Analytical mg/l
Acenaphthylene	208-96-8		3.80E-02
Benzo[a]pyrene	50-32-8	2.00E-04	2.00E-03
Benzo[b]fluoranthene	205-99-2	2.00E-04	2.00E-03
Benzo[k]fluoranthene	207-08-9	2.00E-04	4.00E-03
Benz[a]anthracene	56-55-3	2.00E-04	8.00E-03
Carbazole	86-74-8	1.75E-03	2.30E-01
Chrysene	218-01-9	2.00E-04	8.00E-03
2,4-Dimethylphenol	105-67-9	7.00E-01	5.30E-01
Fluoranthene	206-44-0	1.40E+00	8.10E-02
Naphthalene	91-20-3	1.40E+00	1.40E-00
Pentachlorophenol	87-86-5	1.00E-03	1.90E-01
Phenanthrene	85-01-8		2.30E-01
Phenol	108-95-2	2.10E+01	4.00E-02

In speaking with David Lee, there have been sites in the past that have dealt with the issue of discharging a wastewater that is a hazardous waste to the POTW. Apparently, regulations published in a July 1990 Federal Register places the regulating authority with the CWA and not RCRA. Therefore, the discharge is allowable with the approval of the CWA regulating authority and would not be regulated under RCRA. Following is summary on the issue prepared by David Lee when researching the topic for a previous site.

Sewer Discharges

RCRA contains a domestic sewage exclusion in section 261.4(a)(1). This exclusion states that a mixture of domestic sewage and hazardous waste that passes through a sewer system is not a solid waste, and therefore not a hazardous waste. However, it does not state that generators of hazardous waste may discharge such a waste into the sewer. This silence on the issue has traditionally caused much confusion as to whether a generator of hazardous waste may discharge that waste to the sewer.

The issue was clarified in a July, 1990, amendment to the Clean Water Act regulation. CWA rules now require a hazardous waste generator that is discharging hazardous waste to the sewer to notify the POTW authority, the EPA regional waste management division director, and the state hazardous waste authority of the intention to discharge hazardous waste into the sewer. Certain details of the waste characterization may have to be reported if the discharged quantity exceeds limits specified in the rules. The rule prohibits the discharge of ignitable wastes into the sewer.

EPA decided that the CWA would be a better vehicle for regulating hazardous discharges than RCRA, since CWA routinely deals with similar discharges and RCRA does not. As long as the discharges are limited in concentration of hazardous constituents, those constituents will either be biodegraded in the treatment plant, or sufficiently diluted in the wastewater or sludge so it will not create a health hazard from the discharge or subsequent use of the sludge. Therefore, the responsibility for proper limits on the discharge is placed on the regulatory agency and the POTW authority, which can impose stricter limits of its own.

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

August 5, 1996

Steve Ladner
Staff Environmental Specialist
Kerr-McGee Chemical Corporation
P. O. Box 25861
Oklahoma City, OK 73125

RE: Permit Modification - Addition of Appendix IX Sampling

Mr. Ladner:

The Mississippi Office of Pollution Control (Office) has reviewed your letter of July 23, 1996. The Office agrees with the proposed elimination of some of the Appendix IX constituents with the following exceptions:

1) The sampling should include analysis for polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), arsenic and chromium. These constituents should be included in the analysis because of the facility's past use of pentachlorophenol.

2) The sampling should include analysis for lead. In dealing with facilities that use creosote, the Office has found that cutting the creosote with diesel fuel has been a fairly common practice in the past which could result in lead contamination.

Should you feel that further discussion is necessary, please contact me within 10 days. Otherwise, the Office will begin to initiate the permit modification process to include Appendix IX sampling at the Columbus facility to include the constituents in your July 23, 1996, letter plus the constituents mentioned above.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

EPA COPIED 8/2/96

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

July 23, 1996

Mr. Bruce Ferguson
Mississippi Department of Environmental Quality
Office of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Permit Modification - Addition of Appendix IX Sampling to Permit
Permit No: HW-90-329-01
Kerr-McGee Chemical Corporation - Forest Products Division
Columbus, Mississippi

Dear Mr. Ferguson:

Kerr-McGee Chemical Corporation (KMCC) received your request for an additional permit modification on May 31, 1996. The Mississippi Department of Environmental Quality (MDEQ) is requesting the addition to the permit of an annual Appendix IX sampling of one Effectiveness Well. The request is to change Permit Conditions IV.C.3.b. and IV.H.3.

KMCC understands the need to be consistent with other corrective action sites in Mississippi and KMCC wishes to comply with this request. However, KMCC is requesting the modification of the Appendix IX parameters analyzed for based on knowledge of the site. KMCC has extensive knowledge of the past operations and chemicals handled and stored at the Columbus location.

KMCC has also conducted an extensive groundwater monitoring and remediation program at this site for over 8 years, and has delineated an extensive groundwater contamination plume. The contaminant plume will require years to complete the remediation of the groundwater. At the time of completion of the groundwater cleanup, and for closure KMCC will be required to run a complete Appendix IX analysis on all of the Effective Wells.

Based on process knowledge, historical waste management practices and the extent of contamination, KMCC is requesting the elimination of the following parameters that would not have been wastes or waste by-products at the Columbus facility:

1) Non-Halogenated Volatile Organics (Method 8015)

2) Metals (Method 6010): This site has always treated wood with creosote and never used the inorganic treatment methods such as, Copper Chromium Arsenate (CCA). CCA treatment would need to monitor for the presence of copper, chromium and arsenic; however, metals would not be in appreciable quantities in an organic treatment such as creosote.

3) Semi-Volatile Organics (Method 8250)

4) Cyanide (Method 9010)

5) Chlorinated Herbicides (Method 8150)

6) Mercury (Method 7470)

7) Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzo furans (Method 8280)

KMCC has extensive knowledge of creosote, the use of creosote at this facility, and the degradational products of creosote, none of which would be included in the aforementioned list. KMCC is also conducting groundwater investigations and cleanups at many other creosote wood preserving sites and has extensive knowledge of chemical constituents related to historical releases of creosote to the groundwater regime. Based on this experience, KMCC believes that the Appendix IX analysis for the following constituents will evaluate all possible compounds and degradational by-products related to historical releases of creosote at the Columbus facility:

1) Volatiles (Method 8240)

2) Semi-Volatiles (Method 8270)

Included as an attachment is the complete list of Appendix IX Volatile and Semi-Volatile compounds that will be analyzed.

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

Sincerely,

KERR-McGEE CHEMICAL
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: J. Poor
R. Widman
R. Murphey
N. Bock

NON-STANDARD ANALYTICAL SERVICES Date 07/17/96 Page 1

Proposal: 0 Project: KMCCFPDCOL96 Client: KMFP-COL

Item: 2 Matrix: W Test: MS350 VOA - APP. IX
Using Standard List

PARAM ID	Parameter	SEQ	IDL	MDL	CRDL	DEFAULT	UNITS	HIGH	LOW	ACTION
VOLATILE	VOLATILES	1	0.00	0.00	0.00			0.00	0.00	
74-87-3	CHLOROMETHANE	2	10.00	10.00	10.00		ug/l	0.00	0.00	
74-83-9	BROMOMETHANE	3	10.00	10.00	10.00		ug/l	0.00	0.00	
75-01-4	VINYL CHLORIDE	4	10.00	10.00	10.00		ug/l	0.00	0.00	
75-00-3	CHLOROETHANE	5	10.00	10.00	10.00		ug/l	0.00	0.00	
75-09-2	METHYLENE CHLORIDE	6	5.00	5.00	5.00		ug/l	0.00	0.00	
67-64-1	ACETONE	7	10.00	10.00	10.00		ug/l	0.00	0.00	
75-15-0	CARBON DISULFIDE	8	5.00	5.00	5.00		ug/l	0.00	0.00	
75-35-4	1,1-DICHLOROETHENE	9	5.00	5.00	5.00		ug/l	0.00	0.00	
75-34-3	1,1-DICHLOROETHANE	10	5.00	5.00	5.00		ug/l	0.00	0.00	
540-59-0	1,2-DICHLOROETHENE(TOTAL)	11	5.00	5.00	5.00		ug/l	0.00	0.00	
67-66-3	CHLOROFORM	12	5.00	5.00	5.00		ug/l	0.00	0.00	
107-06-2	1,2-DICHLOROETHANE	13	5.00	5.00	5.00		ug/l	0.00	0.00	
78-93-3	2-BUTANONE	14	10.00	10.00	10.00		ug/l	0.00	0.00	
71-55-6	1,1,1-TRICHLOROETHANE	15	5.00	5.00	5.00		ug/l	0.00	0.00	
56-23-5	CARBON TETRACHLORIDE	16	5.00	5.00	5.00		ug/l	0.00	0.00	
108-05-4	VINYL ACETATE	17	10.00	10.00	10.00		ug/l	0.00	0.00	
75-27-4	BROMODICHLOROMETHANE	18	5.00	5.00	5.00		ug/l	0.00	0.00	
79-34-5	1,1,2,2-TETRACHLOROETHANE	19	5.00	5.00	5.00		ug/l	0.00	0.00	
78-87-5	1,2-DICHLOROPROPANE	20	5.00	5.00	5.00		ug/l	0.00	0.00	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	21	5.00	5.00	5.00		ug/l	0.00	0.00	
79-01-6	TRICHLOROETHENE	22	5.00	5.00	5.00		ug/l	0.00	0.00	
124-48-1	DIBROMOCHLOROMETHANE	23	5.00	5.00	5.00		ug/l	0.00	0.00	
79-00-5	1,1,2-TRICHLOROETHANE	24	5.00	5.00	5.00		ug/l	0.00	0.00	
71-43-2	BENZENE	25	5.00	5.00	5.00		ug/l	0.00	0.00	
10061-01-5	CIS-1,3-DICHLOROPROPENE	26	5.00	5.00	5.00		ug/l	0.00	0.00	
110-75-8	2-CHLOROETHYL VINYL ETHER	27	10.00	10.00	10.00		ug/l	0.00	0.00	
75-25-2	BROMOFORM	28	5.00	5.00	5.00		ug/l	0.00	0.00	
591-78-6	2-HEXANONE	29	10.00	10.00	10.00		ug/l	0.00	0.00	
108-10-1	4-METHYL-2-PENTANONE	30	10.00	10.00	10.00		ug/l	0.00	0.00	
127-18-4	TETRACHLOROETHENE	31	5.00	5.00	5.00		ug/l	0.00	0.00	
108-88-3	TOLUENE	32	5.00	5.00	5.00		ug/l	0.00	0.00	
108-90-7	CHLOROBENZENE	33	5.00	5.00	5.00		ug/l	0.00	0.00	
100-41-4	ETHYLBENZENE	34	5.00	5.00	5.00		ug/l	0.00	0.00	
100-42-5	STYRENE	35	5.00	5.00	5.00		ug/l	0.00	0.00	
1330-20-7	XYLENE (TOTAL)	36	5.00	5.00	5.00		ug/l	0.00	0.00	
107-02-8	ACROLEIN	37	50.00	50.00	50.00		ug/l	0.00	0.00	
74-88-4	METHYL IODIDE	38	5.00	5.00	5.00		ug/l	0.00	0.00	
107-05-1	ALLYL CHLORIDE	39	5.00	5.00	5.00		ug/l	0.00	0.00	
126-99-8	CHLOROPRENE	40	5.00	5.00	5.00		ug/l	0.00	0.00	
110-57-6	TRANS-1,4-DICHLORO-2-BUTENE	41	5.00	5.00	5.00		ug/l	0.00	0.00	
76-01-7	PENTACHLOROETHANE	42	5.00	5.00	5.00		ug/l	0.00	0.00	
75-05-8	ACETONITRILE	43	200.00	200.00	200.00		ug/l	0.00	0.00	
107-13-1	ACRYLONITRILE	44	50.00	50.00	50.00		ug/l	0.00	0.00	
107-12-0	PROPIONITRILE	45	100.00	100.00	100.00		ug/l	0.00	0.00	
126-98-7	METHACRYLONITRILE	46	100.00	100.00	100.00		ug/l	0.00	0.00	
78-83-1	ISOBUTYL ALCOHOL	47	200.00	200.00	200.00		ug/l	0.00	0.00	
123-91-1	1,4-DIOXANE	48	500.00	500.00	500.00		ug/l	0.00	0.00	
80-62-6	METHYL METHACRYLATE	49	5.00	5.00	5.00		ug/l	0.00	0.00	
97-63-2	ETHYL METHACRYLATE	50	5.00	5.00	5.00		ug/l	0.00	0.00	
106-93-4	1,2-DIBROMOETHANE	51	5.00	5.00	5.00		ug/l	0.00	0.00	
630-20-6	1,1,1,2-TETRACHLOROETHANE	52	5.00	5.00	5.00		ug/l	0.00	0.00	
96-18-4	1,2,3-TRICHLOROPROPANE	53	5.00	5.00	5.00		ug/l	0.00	0.00	
75-71-8	DICHLORODIFLUOROMETHANE	54	5.00	5.00	5.00		ug/l	0.00	0.00	
75-69-4	TRICHLOROFLUOROMETHANE	55	5.00	5.00	5.00		ug/l	0.00	0.00	
74-95-3	DIBROMOMETHANE	56	10.00	10.00	10.00		ug/l	0.00	0.00	

NON-STANDARD ANALYTICAL SERVICES Date 07/17/96 Page 2
(continued)

Proposal: 0 Project: KMCCFPDCOL96 Client: KMFP-COL

Item: 2 Matrix: W Test: MS350 VOA - APP. IX
Using Standard List

PARAM ID	Parameter	SEQ	IDL	MDL	CRDL	DEFAULT	UNITS	HIGH	LOW	ACTION
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	57	10.00	10.00	10.00		ug/l	0.00	0.00	

NON-STANDARD ANALYTICAL SERVICES Date 07/17/96 Page 1

Proposal: 0 Project: KMCCFPDCOL96 Client: KMFP-COL

Item: 2 Matrix: W Test: MS550 SEMIVOL APP9
Using Standard List

PARAM ID	Parameter	SEQ	IDL	MDL	CRDL	DEFAULT	UNITS	HIGH	LOW	ACTION
SEMIVOL	SEMIVOLATILES	1	0.00	0.00	0.00			0.00	0.00	
110-86-1	PYRIDINE	2	10.00	10.00	10.00		ug/l	0.00	0.00	
108-95-2	PHENOL	3	10.00	10.00	10.00		ug/l	0.00	0.00	
111-44-4	BIS(2-CHLOROETHYL)ETHER	4	10.00	10.00	10.00		ug/l	0.00	0.00	
95-57-8	2-CHLOROPHENOL	5	10.00	10.00	10.00		ug/l	0.00	0.00	
541-73-1	1,3-DICHLOROBENZENE	6	10.00	10.00	10.00		ug/l	0.00	0.00	
106-46-7	1,4-DICHLOROBENZENE	7	10.00	10.00	10.00		ug/l	0.00	0.00	
100-51-6	BENZYL ALCOHOL	8	10.00	10.00	10.00		ug/l	0.00	0.00	
95-50-1	1,2-DICHLOROBENZENE	9	10.00	10.00	10.00		ug/l	0.00	0.00	
95-48-7	2-METHYLPHENOL	10	10.00	10.00	10.00		ug/l	0.00	0.00	
106-44-5	4-METHYLPHENOL	11	10.00	10.00	10.00		ug/l	0.00	0.00	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	12	10.00	10.00	10.00		ug/l	0.00	0.00	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	13	10.00	10.00	10.00		ug/l	0.00	0.00	
67-72-1	HEXACHLOROETHANE	14	10.00	10.00	10.00		ug/l	0.00	0.00	
98-95-3	NITROBENZENE	15	10.00	10.00	10.00		ug/l	0.00	0.00	
78-59-1	ISOPHORONE	16	10.00	10.00	10.00		ug/l	0.00	0.00	
88-75-5	2-NITROPHENOL	17	10.00	10.00	10.00		ug/l	0.00	0.00	
105-67-9	2,4-DIMETHYLPHENOL	18	10.00	10.00	10.00		ug/l	0.00	0.00	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	19	10.00	10.00	10.00		ug/l	0.00	0.00	
120-83-2	2,4-DICHLOROPHENOL	20	10.00	10.00	10.00		ug/l	0.00	0.00	
120-82-1	1,2,4-TRICHLOROBENZENE	21	10.00	10.00	10.00		ug/l	0.00	0.00	
91-20-3	NAPHTHALENE	22	10.00	10.00	10.00		ug/l	0.00	0.00	
106-47-8	4-CHLOROANILINE	23	10.00	10.00	10.00		ug/l	0.00	0.00	
87-68-3	HEXACHLOROBUTADIENE	24	10.00	10.00	10.00		ug/l	0.00	0.00	
59-50-7	4-CHLORO-3-METHYLPHENOL	25	10.00	10.00	10.00		ug/l	0.00	0.00	
91-57-6	2-METHYLNAPHTHALENE	26	10.00	10.00	10.00		ug/l	0.00	0.00	
77-47-4	HEXACHLOROCYCLOPENTADIENE	27	10.00	10.00	10.00		ug/l	0.00	0.00	
88-06-2	2,4,6-TRICHLOROPHENOL	28	10.00	10.00	10.00		ug/l	0.00	0.00	
95-95-4	2,4,5-TRICHLOROPHENOL	29	50.00	50.00	50.00		ug/l	0.00	0.00	
91-58-7	2-CHLORONAPHTHALENE	30	10.00	10.00	10.00		ug/l	0.00	0.00	
88-74-4	2-NITROANILINE	31	50.00	50.00	50.00		ug/l	0.00	0.00	
131-11-3	DIMETHYL PHTHALATE	32	10.00	10.00	10.00		ug/l	0.00	0.00	
208-96-8	ACENAPHTHYLENE	33	10.00	10.00	10.00		ug/l	0.00	0.00	
99-09-2	3-NITROANILINE	34	50.00	50.00	50.00		ug/l	0.00	0.00	
83-32-9	ACENAPHTHENE	35	10.00	10.00	10.00		ug/l	0.00	0.00	
51-28-5	2,4-DINITROPHENOL	36	50.00	50.00	50.00		ug/l	0.00	0.00	
100-02-7	4-NITROPHENOL	37	50.00	50.00	50.00		ug/l	0.00	0.00	
132-64-9	DIBENZOFURAN	38	10.00	10.00	10.00		ug/l	0.00	0.00	
121-14-2	2,4-DINITROTOLUENE	39	10.00	10.00	10.00		ug/l	0.00	0.00	
606-20-2	2,6-DINITROTOLUENE	40	10.00	10.00	10.00		ug/l	0.00	0.00	
84-66-2	DIETHYLPHTHALATE	41	10.00	10.00	10.00		ug/l	0.00	0.00	
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	42	10.00	10.00	10.00		ug/l	0.00	0.00	
86-73-7	FLUORENE	43	10.00	10.00	10.00		ug/l	0.00	0.00	
100-01-6	4-NITROANILINE	44	50.00	50.00	50.00		ug/l	0.00	0.00	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	45	50.00	50.00	50.00		ug/l	0.00	0.00	
86-30-6	N-NITROSODIPHENYLAMINE	46	10.00	10.00	10.00		ug/l	0.00	0.00	
101-55-3	4-BROMOPHENYL-PHENYLETHER	47	10.00	10.00	10.00		ug/l	0.00	0.00	
118-74-1	HEXACHLOROBENZENE	48	10.00	10.00	10.00		ug/l	0.00	0.00	
87-86-5	PENTACHLOROPHENOL	49	50.00	50.00	50.00		ug/l	0.00	0.00	
85-01-8	PHENANTHRENE	50	10.00	10.00	10.00		ug/l	0.00	0.00	
120-12-7	ANTHRACENE	51	10.00	10.00	10.00		ug/l	0.00	0.00	
84-74-2	DI-N-BUTYL PHTHALATE	52	10.00	10.00	10.00		ug/l	0.00	0.00	
206-44-0	FLUORANTHENE	53	10.00	10.00	10.00		ug/l	0.00	0.00	
129-00-0	PYRENE	54	10.00	10.00	10.00		ug/l	0.00	0.00	
85-68-7	BUTYL BENZYL PHTHALATE	55	10.00	10.00	10.00		ug/l	0.00	0.00	
91-94-1	3,3'-DICHLOROBENZIDINE	56	20.00	20.00	20.00		ug/l	0.00	0.00	

NON-STANDARD ANALYTICAL SERVICES Date 07/17/96 Page 2
(continued)
Proposal: 0 Project: KMCCFPDCOL96 Client: KMFP-COL

Item: 2 Matrix: W Test: MS550 SEMIVOL APP9
Using Standard List

PARAM ID	Parameter	SEQ	IDL	MDL	CRDL	DEFAULT	UNITS	HIGH	LOW	ACTION
56-55-3	BENZO(A)ANTHRACENE	57	10.00	10.00	10.00		ug/l	0.00	0.00	
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	58	10.00	10.00	10.00		ug/l	0.00	0.00	
218-01-9	CHRYSENE	59	10.00	10.00	10.00		ug/l	0.00	0.00	
117-84-0	DI-N-OCTYL PHTHALATE	60	10.00	10.00	10.00		ug/l	0.00	0.00	
205-99-2	BENZO(B)FLUORANTHENE	61	10.00	10.00	10.00		ug/l	0.00	0.00	
207-08-9	BENZO(K)FLUORANTHENE	62	10.00	10.00	10.00		ug/l	0.00	0.00	
50-32-8	BENZO(A)PYRENE	63	10.00	10.00	10.00		ug/l	0.00	0.00	
193-39-5	INDENO(1,2,3-CD)PYRENE	64	10.00	10.00	10.00		ug/l	0.00	0.00	
53-70-3	DIBENZ(A,H)ANTHRACENE	65	10.00	10.00	10.00		ug/l	0.00	0.00	
191-24-2	BENZO(G,H,I)PERYLENE	66	10.00	10.00	10.00		ug/l	0.00	0.00	
62-50-0	ETHYL METHANESULFONATE	67	10.00	10.00	10.00		ug/l	0.00	0.00	
106-50-3	P-PHENYLENEDIAMINE	68	50.00	50.00	50.00		ug/l	0.00	0.00	
55-18-5	N-NITROSODIETHYLAMINE	69	10.00	10.00	10.00		ug/l	0.00	0.00	
10595-95-6	N-NITROSOMETHYLETHYLAMINE	70	10.00	10.00	10.00		ug/l	0.00	0.00	
924-16-3	N-NITROSODIBUTYLAMINE	71	10.00	10.00	10.00		ug/l	0.00	0.00	
100-75-4	N-NITROSOPIPERIDINE	72	10.00	10.00	10.00		ug/l	0.00	0.00	
298-00-0	METHYL PARATHION	73	20.00	20.00	20.00		ug/l	0.00	0.00	
94-59-7	SAFROLE	74	10.00	10.00	10.00		ug/l	0.00	0.00	
120-58-1	ISOSAFROLE	75	10.00	10.00	10.00		ug/l	0.00	0.00	
109-06-8	2-PICOLINE	76	10.00	10.00	10.00		ug/l	0.00	0.00	
62-44-2	PHENACETIN	77	10.00	10.00	10.00		ug/l	0.00	0.00	
95-53-4	O-TOLUIDINE	78	10.00	10.00	10.00		ug/l	0.00	0.00	
119-93-7	3,3-DIMETHYLBENZIDINE	79	10.00	10.00	10.00		ug/l	0.00	0.00	
99-65-0	1,3-DINITROBENZENE	80	10.00	10.00	10.00		ug/l	0.00	0.00	
91-80-5	METHAPYRILENE	81	20.00	20.00	20.00		ug/l	0.00	0.00	
2303-16-4	DIALLATE	82	10.00	10.00	10.00		ug/l	0.00	0.00	
99-35-4	1,3,5-TRINITROBENZENE	83	10.00	10.00	10.00		ug/l	0.00	0.00	
52-85-7	FAMPHUR	84	10.00	10.00	10.00		ug/l	0.00	0.00	
56-57-5	4-NITROQUINOLINE 1-OXIDE	85	50.00	50.00	50.00		ug/l	0.00	0.00	
95-94-3	1,2,4,5-TETRACHLOROBENZENE	86	10.00	10.00	10.00		ug/l	0.00	0.00	
82-68-8	PENTACHLORONITROBENZENE	87	50.00	50.00	50.00		ug/l	0.00	0.00	
298-02-2	PHORATE	88	10.00	10.00	10.00		ug/l	0.00	0.00	
140-57-8	ARAMITE	89	50.00	50.00	50.00		ug/l	0.00	0.00	
62-75-9	N-NITROSODIMETHYLAMINE	90	10.00	10.00	10.00		ug/l	0.00	0.00	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	91	10.00	10.00	10.00		ug/l	0.00	0.00	
510-15-6	CHLOROBENZILATE	92	10.00	10.00	10.00		ug/l	0.00	0.00	
297-97-2	THIONAZIN	93	20.00	20.00	20.00		ug/l	0.00	0.00	
298-04-4	DISULFOTON	94	10.00	10.00	10.00		ug/l	0.00	0.00	
465-73-6	ISODRIN	95	20.00	20.00	20.00		ug/l	0.00	0.00	
59-89-2	N-NITROSOMORPHOLINE	96	10.00	10.00	10.00		ug/l	0.00	0.00	
608-93-5	PENTACHLOROBENZENE	97	10.00	10.00	10.00		ug/l	0.00	0.00	
92-67-1	4-AMINOBIPHENYL	98	10.00	10.00	10.00		ug/l	0.00	0.00	
1888-71-7	HEXACHLOROPROPENE	99	10.00	10.00	10.00		ug/l	0.00	0.00	
87-65-0	2,6-DICHLOROPHENOL	100	10.00	10.00	10.00		ug/l	0.00	0.00	
66-27-3	METHYL METHANESULFONATE	101	50.00	50.00	50.00		ug/l	0.00	0.00	
130-15-4	1,4-NAPHTHOQUINONE	102	10.00	10.00	10.00		ug/l	0.00	0.00	
930-55-2	N-NITROSOPYRROLIDINE	103	10.00	10.00	10.00		ug/l	0.00	0.00	
98-86-2	ACETOPHENONE	104	10.00	10.00	10.00		ug/l	0.00	0.00	
60-51-5	DIMETHOATE	105	10.00	10.00	10.00		ug/l	0.00	0.00	
56-49-5	3-METHYL CHOLANTHRENE	106	10.00	10.00	10.00		ug/l	0.00	0.00	
53-96-3	2-ACETYLAMINOFLUORENE	107	10.00	10.00	10.00		ug/l	0.00	0.00	
62-53-3	ANILINE	108	10.00	10.00	10.00		ug/l	0.00	0.00	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	109	10.00	10.00	10.00		ug/l	0.00	0.00	
70-30-4	HEXACHLOROPHENE	110	200.00	200.00	200.00		ug/l	0.00	0.00	
143-50-0	KEPONE	111	50.00	50.00	50.00		ug/l	0.00	0.00	
134-32-7	1-NAPHTHYLAMINE	112	10.00	10.00	10.00		ug/l	0.00	0.00	

NON-STANDARD ANALYTICAL SERVICES Date 07/17/96 Page 3
(continued)

Proposal: 0 Project: KMCCFPDCOL96 Client: KMFP-COL

Item: 2 Matrix: W Test: MS550 SEMIVOL APP9
Using Standard List

PARAM ID	Parameter	SEQ	IDL	MDL	CRDL	DEFAULT	UNITS	HIGH	LOW	ACTION
91-59-8	2-NAPHTHYLAMINE	113	10.00	10.00	10.00		ug/l	0.00	0.00	
23950-58-5	PRONAMIDE	114	10.00	10.00	10.00		ug/l	0.00	0.00	
57-97-6	7,12-DIMETHYLBENZ(A)ANTHRACENE	115	10.00	10.00	10.00		ug/l	0.00	0.00	
126-68-1	O,O,O-TRIETHYLPHOSPHOROTHIOATE	116	10.00	10.00	10.00		ug/l	0.00	0.00	
3689-24-5	SULFOTEP	117	20.00	20.00	20.00		ug/l	0.00	0.00	
99-55-8	5-NITRO-O-TOLUIDINE	118	10.00	10.00	10.00		ug/l	0.00	0.00	
122-39-4	DIPHENYLAMINE	119	10.00	10.00	10.00		ug/l	0.00	0.00	
88-85-7	DINOSEB	120	10.00	10.00	10.00		ug/l	0.00	0.00	
56-38-2	PARATHION	121	20.00	20.00	20.00		ug/l	0.00	0.00	
60-11-7	METHYL YELLOW	122	10.00	10.00	10.00		ug/l	0.00	0.00	
122-09-8	A,A-DIMETHYLPHENETHYLAMINE	123	10.00	10.00	10.00		ug/l	0.00	0.00	

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

July 17, 1996

CERTIFIED MAIL NO. Z 156 165 070
Steve Ladner
Staff Environmental Specialist
Kerr-McGee Chemical Corporation
P. O. Box 25861
Oklahoma City, OK 73125

RE: Permit Modification
RCRA Permit No. HW-90-329-01
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Mr. Ladner:

On July 9, 1996, the Environmental Quality Permit Board granted approval to the requested modification of the referenced permit. Therefore, the permit has been modified as follows:

- References to the Sampling and Analysis plan in Permit Condition IV.E. was changed to reflect the May 31, 1996, revision.

The amended pages are enclosed. Please insert these into your copy of the permit and discard the outdated pages.

Kerr-McGee is now required to send a notice of the modification to all persons on the mailing list in accordance with MHWMR 270.42(a)(1)(ii). A copy of this list is enclosed. However, please be aware of the conditions of MHWMR 270.42(a)(1(iii).

If you have any questions, please call Bruce Ferguson at (601) 961-5141.

Sincerely,

Charles H. Chisolm, Head
Office of Pollution Control

cc: Mr. Russ McLean, U. S. EPA, Region IV

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

June 21, 1996

Steve Ladner
Staff Environmental Specialist
Kerr-McGee Chemcial Corporation
P. O. Box 25861
Oklahoma City, OK 73125

RE: Appendix IX Sampling in Effectiveness Wells
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Ladner:

In order to be consistent with regulatory requirements, at least one monitoring well at the above referenced facility must be sampled for Part 264, Appendix IX constituents. For this reason, the Mississippi Office of Pollution Control (Office) is proposing the following highlighted changes to permit language in the facility's post-closure permit:

Permit Condition IV.C.3.e. - All effectiveness monitoring wells listed in Permit Condition IV.B.1.e. shall be sampled semi-annually for total phenol, naphthalene, and acenapthylene and biennially for the groundwater protection parameters listed in Permit Condition IV.C.1. When analyses from a sampling event indicate that total phenol, naphthalene, and acenapthylene have reached the groundwater protection standards listed in Permit Condition IV.C.1., then the effectiveness wells shall be sampled semi-annually for the groundwater protection parameters listed in Permit Condition IV.C.1. One effectiveness well shall be sampled annually and analyzed for all Appendix IX Parameters. Within 90 days of meeting the groundwater protection standards listed in Permit Condition IV.C.1., the effectiveness monitoring well(s) in Permit Condition IV.B.1.e. shall be sampled annually for all Appendix IX Parameters as specified by MHWMR 264.99(g).

Permit condition IV.G.3. - The Permittee shall analyze samples from one effectiveness well annually for all constituents contained in MHWMR 261, Appendix IX to determine if additional hazardous constituents are present in the uppermost aquifer. If the Permittee finds additional hazardous constituents present, their concentrations shall be reported to the Executive Director in writing within seven days from completion of the analysis. Additional hazardous constituents shall be defined as any constituent which has not already been determined to be present in the groundwater beneath the facility.

Should you have any questions or comments, please contact me at (601) 961-5141 within 30 days. Otherwise, the Office will initiate a permit modification to make the above mentioned changes to the facility's post-closure permit.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALI
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

May 31, 1996

Certified Mail No. - Z 732 424 527
Mr. Steve Ladner
Kerr-McGee Chemical Corporation
P. O. Box 25861
Oklahoma City, OK 73125

Re: Modification - May
Kerr-McGee Chemi
Columbus, Mississi

Z 732 424 527
Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to Steve Ladner	
Street and No. 1	
P.O., State and ZIP Code P.O. Box 25861 Okcty OK 73125	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, March 1993

Dear Mr. Ladner:

The Mississippi Office of Pollution Control (Office) has reviewed the above referenced document. The Office has made the following class determinations on the requested modifications:

1) **Request to change monitoring well CME-3 from a boundary control well to an upgradient well.** The Office rejects the request as a Class 1 modification because low levels of contaminants have been detected in CME-3 during past sampling events and the change would reduce the required frequency of monitoring. This letter should serve as notice in accordance with Mississippi Hazardous Waste Management Regulation 270.42(1)(iii).

2) **Request to replace the damaged monitoring wells CMW-64 and CMW-53 with the monitoring wells CMW-56 and CMW-66.** The Office has determined that this request is a Class 1 modification requiring no prior approval of the Director.

3) **Request to replace the reference analytical method CFR Method 610 with SW-846 Method 8100 for Acenaphthylene and Naphthalene.** The Office has determined that this request is a Class 1 modification requiring no prior approval of the Director.

4) **Request to change revision date for the groundwater sampling and analysis plan to June 7, 1996.** The Office has determined that this request is a Class 1 modification that will require the prior approval of the Director. The modification to the sampling and analysis plan should be submitted for approval.

5) **Request to change reference to Appendix IX sampling in Permit Conditions IV.C.3.b. and IV.H.3..** Currently the permit does not require Appendix IX sampling until the groundwater protection standard has been met. This is inconsistent with the regulations at the time the permit was issued and with the requirements placed on other facilities in the State of Mississippi that are under corrective action. The Office requests that the permit be modified to require annual sampling for Appendix IX in one effectiveness well.

Enclosed are the modified pages of the permit to include the changes described in items 2 and 3 above. Once the modified sampling and analysis plan has been submitted, the permit will be modified to reflect item 4, pending approval by the director. Permit language regarding the sampling for Appendix IX constituents will be drafted and forwarded to you for your review.

Should you have any questions, please contact me at (601) 961-5141.

Sincerely,

Bruce Ferguson

Bruce Ferguson
Hazardous Waste Division

RECEIVED
MAY 23 1996
Dept. of Environmental Quality
Office of Pollution Control

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

May 16, 1996

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
RCRA Permit HW-90-329-01

Dear Mr. Ferguson:

During our April 18, 1995 meeting in Jackson, Mississippi, we clarified changes which will occur in the Annual Groundwater Monitoring Report and also the Semi-Annual Corrective Action Report due to the August 1996 permit modifications. A summary of reporting requirements are as follows:

- Groundwater analyses will be preformed on the outlined wells on a semi-annual basis. Attachment A was presented at the meeting.

- Water levels and field parameters are measured also on semi-annual basis.

- Due to the change from quarterly to semi-annual groundwater sampling, the required annual reports will be scaled back dramatically. Each of the semi-annual and annual reports will contain one set of analyses, one set of water level measurements and hence one potentiometric map of each of the Alluvial formation and the Eutaw formation.

Forest Products

- Historical presentations and background information is no longer necessary. Only new assessment work or results will be presented in the annual reports.

- The effectiveness of the corrective action will be presented in the semi-annual report.

To help reduce the thickness of the report, printing of the text will occur on both sides of the page. Two report copies (two) will be provided with flat-sided folders rather than in three-ringed binders.

Thank you for meeting with Steve Ladner and myself to help clarify these changes. If you have any questions or comments please do not hesitate to contact me at (405) 270-2675.

Sincerely,

SAFETY AND ENVIRONMENTAL

JAMI M. POOR
Senior Hydrologist

Attachment

cc: S. A. Ladner
R.K. Widmann

ATTACHMENT A

CORRECTIVE ACTION GROUNDWATER SAMPLING SUMMARY

Outlined in Permit #HW-90-329-01, Modified 8/2/95

Columbus, Miss.	WELL	1ST QTR 2/14/96	2ND QTR 5/15/96	3RD QTR 8/14/96	4TH QTR 11/13/96
Compliance Wells	CMW6		DEFP		DEFP
	CMW7		DEFP		DEFP
	CMW8		DEFP		DEFP
Effectiveness Wells (Odd years analyze PH for both sampled quarters)	CMW3	---	PH		DEFP
	CMW11	---	PH		DEFP
	CMW19		PH		DEFP
	CMW24		PH		DEFP
	CMW66		PH		DEFP
	CMW61		PH		DEFP
Boundary Wells	CMW14	---	DEFP	---	DEFP
	CMW16	---	DEFP	---	DEFP
	CMW26		DEFP		DEFP
	CMW27		DEFP		DEFP
	CMW51		DEFP		DEFP
	CMW57		DEFP		DEFP
	CMW60		DEFP		DEFP
	CMW56		DEFP		DEFP
	CMW65		DEFP	---	DEFP
Deep Monitoring Wells	CME5	---	DEFP	---	DEFP
	CME6	---	DEFP	---	DEFP
	CME7	---	DEFP	---	DEFP
	CME8	---	DEFP	---	DEFP
Upgradient Well	CMW1AR				DEFP
	CME3				DEFP

F- Benzene and Total Xylene D- FORP Base/Neutral E- FORP Acid
P-Total phenol H-Acenaphthylene, Naphthalene using GC Method

NOTE: If immiscible liquids are present, samples from the affected well are not collected; however, the immiscible phase thickness is recorded on the field parameter form. Free product shall be bailed from the well each quarter.

Field pH, field specific conductance and field temperature are measured and recorded on the field parameter form for all wells sampled. Water levels and immiscible liquid levels are to be measured on all monitoring wells.

EPA COPIED 5/21/96

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

May 7, 1996

Mr. Bruce Ferguson
Mississippi Department of Environmental Quality
Office of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Class I Permit Modifications
Permit No: HW-90-329-01
Kerr-McGee Chemical Corporation-Forest Products Division
Columbus, Mississippi

Dear Mr. Ferguson:

Kerr-McGee Chemical Corporation (KMCC) is requesting Class I permit modifications for the Hazardous Waste Management Permit HW-90-329-01 for the Columbus, Mississippi facility. KMCC is requesting the following permit modifications:

1) IV. B WELL LOCATION, INSTALLATION AND CONSTRUCTION

IV.B.1.b Upgradient Monitoring Well - add CME-3 to the upgradient well status.

IV.B.1.c Boundary Control Wells - delete CMW-64 from the boundary control well status and add CMW-56.

IV.B.1.e. Effectiveness Wells - delete CMW-53 from the effectiveness well status and add CMW-66.

2) IV. C. GROUND-WATER PROTECTION STANDARD

IV.C.1. KOO1 Appendix VII Base/Neutral Compounds

Acenaphthylene - Method 3510/610 should be changed to Method 3510/8100.

Naphthalene - Method 3510/610 should be changed to Method 3510/8100.

IV.C.3.b. Upgradient monitoring wells listed in Permit Condition IV.B.b. shall be sampled annually for the groundwater protection parameters listed in Permit Condition IV.C.1. Within 90 days (insert *after all compliance wells, effectiveness , boundary control, and deep wells*) listed in

Permit Condition IV.C., the upgradient monitoring wells listed in Permit condition IV.B.1.b. shall be sampled annually for all Appendix IX Parameters as specified by MHWMR 264.99 (g).

3) IV.E SAMPLING AND ANALYSIS PROCEDURES

IV.E.1 - change revision date for the sampling and analysis plan to June 7, 1996

IV.E.2 - change revision date for the sampling and analysis plan to June 7, 1996

IV.E.3 - change revision date for the sampling and analysis plan to June 7, 1996

IV.E.4 - change revision date for the sampling and analysis plan to June 7, 1996

4) IV.H.3. (Insert *Upon reaching the groundwater protection standards in Permit Condition IV.C.1. for all Compliance Wells,*), the Permittee shall analyze samples from all monitoring wells at the compliance point for all constituents contained in MHWMR 261, Appendix IX to determine if additional hazardous constituents are present in the uppermost aquifer. If the Permittee ..... in the groundwater beneath the facility.

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

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVSION

Stephen A. Ladner
Staff Environmental Specialist

cc: N.E. Bock, KMCC
R.P. Murphy, KMCC-Columbus
J.L. Poor, KM Hydrology

KERR-McGEE CHEMICAL CORPORATION
P.O. BOX 906 • COLUMBUS, MISSISSIPPI 39703-0906

RECEIVED
DEC - 8 1995
Dept. of Environmental Quality
Office of Pollution Control

December 6, 1995

Mississippi Department of Environmental Quality
Hazardous Waste Division
Bruce Ferguson
P. O. Box 10385
Jackson, Mississippi 39289-0385

Dear Mr. Ferguson:

Please find following responses to your letter to our facility dated September 12, 1995 concerning your August 1`7 compliance evaluation inspection. In your letter you addressed two conditions that were not found to be violations that we are addressing.

Condition Number 1

Monitoring well MW-63 has apparently been covered due to an expansion of the school parking lot. This well should be relocated. If the condition of the well is such that it can no longer be used, the well should be properly abandoned as outlined in Attachment IV-4 of the facilities Hazardous Waste Management Permit No. HW-90-329-01.

Facility Response

The monitoring well that was covered in the expansion of the school parking lot was CMW-64 instead of MW-63. CMW-64 was located by surveyors and has been plugged and abandoned properly. This was not a well required by our Hazardous Waste Permit No. HW 90-329-01. This was addressed in the attached letter to you from Jami Poor, KMCC Senior Hydrologist, dated October 4, 1995.

Condition Number 2

The roll off box used for the storage of hazardous waste at the facility was reviewed as meeting the requirements of a container storage area. Documentation of the inspection of this area in accordance with MHWMR 265.174 was not requested on the day of the inspection. The facility should notify the Office as to whether this inspection is being performed.

Facility Response

The container storage area inspection report is being performed at the Columbus facility. Following is a copy of the inspection report including accumulation start date and all shipping information.

Should you have any questions, please contact me at (601) 328-7551.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Charles J. Swann

Charles J. Swann
Supervisor Treating Operations

CJS/tjj

cc: S. L. Ladner
File

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

October 4, 1995

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

Re: Monitor Well Modifications
Kerr-McGee Chemical Corporation - Forest Product Division
Columbus, Mississippi
EPA I.D. Number - MSD 990 866 329
Hazardous Waste Permit Number HW-90-329-01

Dear Mr. Ferguson,

Kerr-McGee Chemical - Forest Product Division (KMCC-FPD) maintains groundwater monitoring wells both on-site and off-site of the facility property which are not required by Hazardous Waste Permit No. HW 90-329-01. Two of these monitoring wells, CMW64 and CMW54 require modification. Attachment A delineates the contaminant plume and locates these two monitor wells.

Upon inspection of monitor wells during the third quarter 1995 sampling of groundwater monitor wells (performed August 9, 1995), it was discovered that monitor well CMW64 had been covered with asphalt during parking lot expansion. KMCC-FPD believes that this well is no longer required to delineate the southern-most plume and proposes to abandon monitor well CMW64. Under the circumstances, this well will be plugged as recommended by Mr. Johnny Biggert of the Mississippi Bureau of Land and Water Resources .

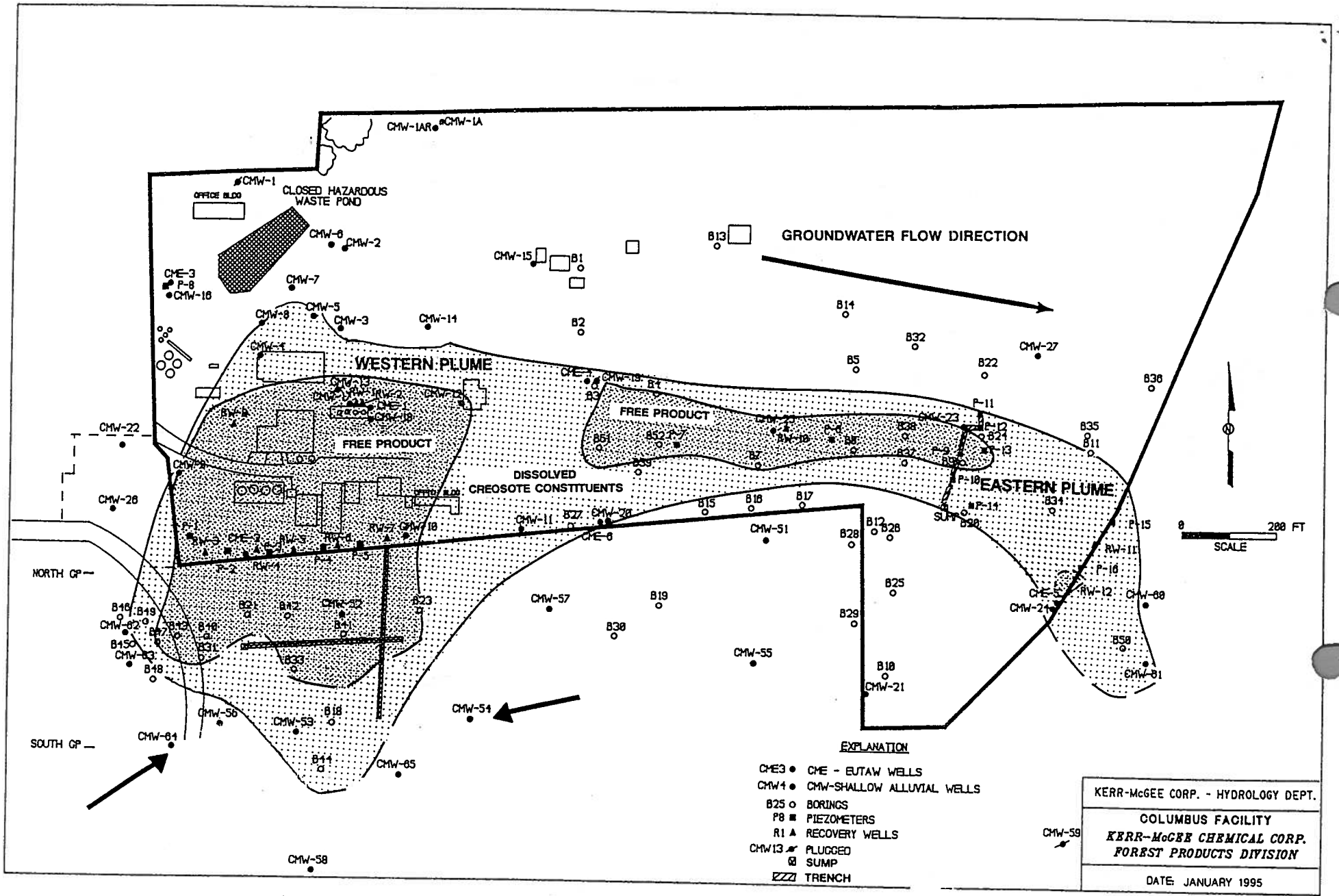
Monitor well CMW54 was installed on cemetery property to determine the extent of the contaminant plume. KMCC-FPD has since been informed by Mr. Edwards (cemetery care-taker) that this well will soon be surrounded by the encroaching graves. Not only is this an inconvenience for the cemetery, but also the well's integrity would be compromised. Monitor wells CMW65 and CMW75 are both clean and therefore mark the extent of the plume. KMCC-FPD recommends plugging monitor well CMW54 with your approval.

This correspondence will be followed by a phone call should you have any questions regarding the proposed plugging of these two monitor wells. I may also be reached at 405/270-1675, or Steve Ladner at 405/270-2625.

Sincerely,

Jami Poor
Senior Hydrologist

CC: S.A. Ladner
James S. Kutzman - EPA
A. Helms



ATTACHMENT A: DELINEATION OF CONTAMINANT PLUME

#1

FIGURE 3-5

CONTAINER STORAGE AREA
INSPECTION REPORT
40 CFR 262, Subpart C
*WEEKLY INSPECTION REPORT

Inspection Item	Good	Needs Attention (Describe)	Maintenance Performed
Container Condition	✓		
Waste Compatibility	✓		
Container Management			
Closed	✓		
Leak	✓		
Deteriorate	✓		
Handling	✓		
Container Marking			
"Hazardous Waste" Date	10-12-95		
Accumulation Time			
Less than 2,200 lbs/month (180 days storage permitted)	✓		
Less than 13,200 lbs (in 6 month period)			
Greater than 200 miles (Special exclusion)			
Administrative			
Preparedness & Prevention Plan	✓		
Contingency Plan	✓		
Emergency Coordinator	✓		
Current Personnel Training	✓		

* Whenever quantities of hazardous waste exceed 55 gallons in the container storage area, the Container Storage Inspection Report must be completed weekly.

DOT Classification: 3077
EPA Classification: F034
Shipped To: CHEM. WASTE MGT
Transporter: TERRA FIRST
Date Shipped: 11-28-95
Manifest No: CWMA 791827 - 00006

Signature: Charles Swann
Time: 7AM
Date: 11-27-95

4478C

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

October 4, 1995

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

Re: Monitor Well Modifications
Kerr-McGee Chemical Corporation - Forest Product Division
Columbus, Mississippi
EPA I.D. Number - MSD 990 866 329
Hazardous Waste Permit Number HW-90-329-01

Dear Mr. Ferguson,

Kerr-McGee Chemical - Forest Product Division (KMCC-FPD) maintains groundwater monitoring wells both on-site and off-site of the facility property which are not required by Hazardous Waste Permit No. HW 90-329-01. Two of these monitoring wells, CMW64 and CMW54 require modification. Attachment A delineates the contaminant plume and locates these two monitor wells.

Upon inspection of monitor wells during the third quarter 1995 sampling of groundwater monitor wells (performed August 9, 1995), it was discovered that monitor well CMW64 had been covered with asphalt during parking lot expansion. KMCC-FPD believes that this well is no longer required to delineate the southern-most plume and proposes to abandon monitor well CMW64. Under the circumstances, this well will be plugged as recommended by Mr. Johnny Biggert of the Mississippi Bureau of Land and Water Resources .

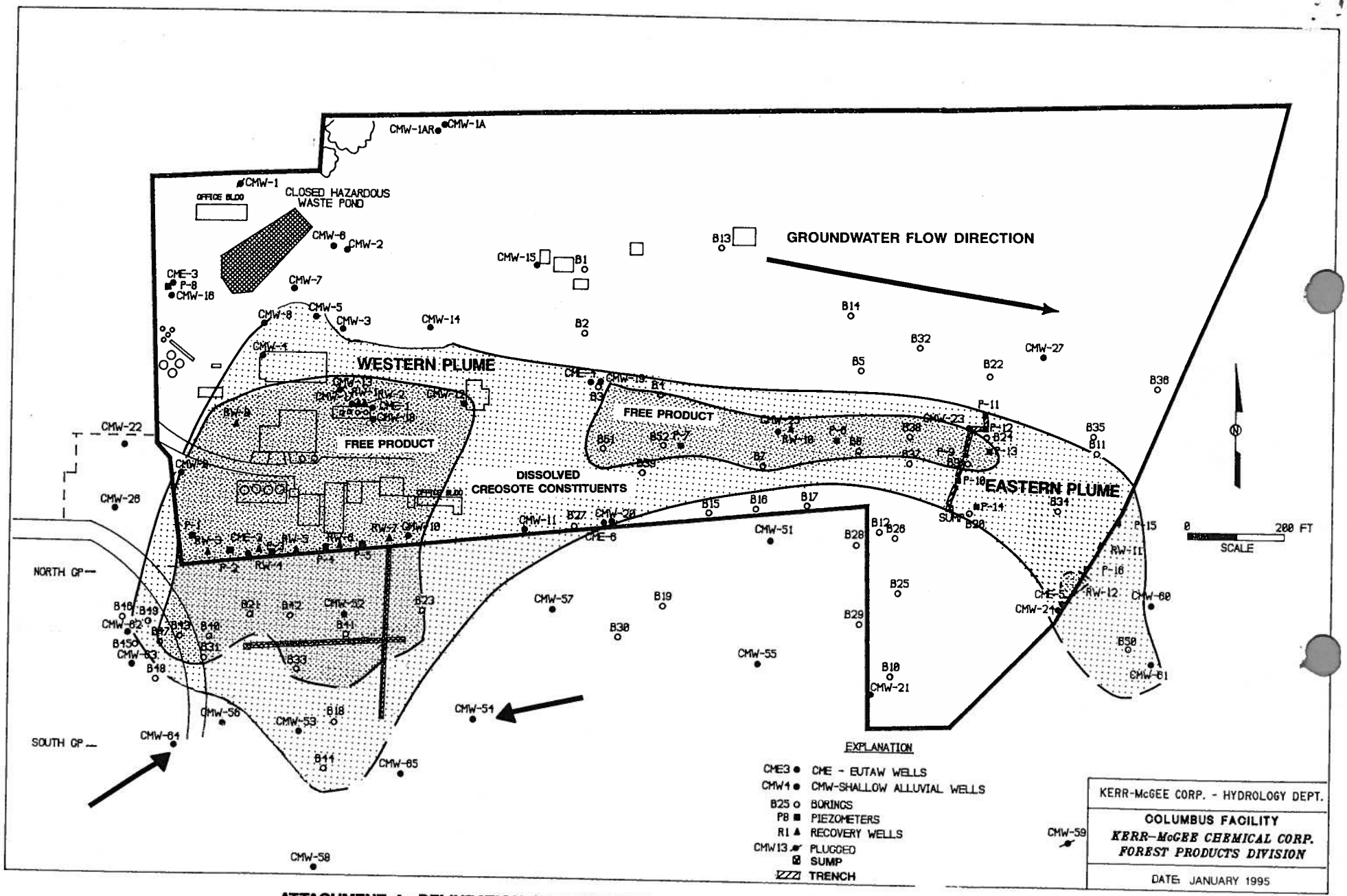
Monitor well CMW54 was installed on cemetery property to determine the extent of the contaminant plume. KMCC-FPD has since been informed by Mr. Edwards (cemetery care-taker) that this well will soon be surrounded by the encroaching graves. Not only is this an inconvenience for the cemetery, but also the well's integrity would be compromised. Monitor wells CMW65 and CMW75 are both clean and therefore mark the extent of the plume. KMCC-FPD recommends plugging monitor well CMW54 with your approval.

This correspondence will be followed by a phone call should you have any questions regarding the proposed plugging of these two monitor wells. I may also be reached at 405/270-1675, or Steve Ladner at 405/270-2625.

Sincerely,

Jami Poor
Senior Hydrologist

CC: S.A. Ladner
James S. Kutzman - EPA
A. Helms



ATTACHMENT A: DELINEATION OF CONTAMINANT PLUME

STATE OF MISSISSIPPI

DEPARTMENT OF ENVIRONMENTAL QUALITY

JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

September 12, 1995

CERTIFIED MAIL NO. P 167 726 901
Mr. Tony Helms
Plant Manager
Kerr-McGee Chemical Corporation
P. O. Box 906
Columbus, Mississippi 39701

Dear Mr. Helms:

Enclosed please find an inspection report and checklist that was completed as a result of a compliance evaluation inspection at your facility on August 17, 1995. No violations were found on the day of the inspection. The following conditions were not found to be violations, however, they should be addressed:

1. Monitoring MW-63 has apparently been covered due to an expansion of the school parking lot. This well should be located. If the condition of the well is such that it can no longer be used, the well should be properly abandoned as outlined in Attachment IV-4 of the facility's Hazardous Waste Management Permit No. HW-90-329-01.

2. The roll-off box used for the storage of hazardous waste at the facility was viewed as meeting the requirements of a container storage area. Documentation of the inspection of this area in accordance with MHWMR 265.174 was not requested of the facility on the day of the inspection. The facility should notify the Office as to whether this inspection is being performed.

Should you have any questions, please contact me at (601) 961-5141.

Sincerely,

Bruce Ferguson
...s Waste Division

P 167 726 901

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	
Street and No	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, June 1991

...SON, MS 39289-0385, (601) 961-5171

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

August 2, 1995

Mr. Tony Helms
P. O. Box 906
Columbus, Mississippi 39701

Re: Permit Modification
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Helms:

The Mississippi Environmental Quality Permit Board approved the modification of your facility's permit on July 25, 1995. The modification was placed on public notice from May 22 to July 7, 1995. No comments were received from the public and only one request for information was received.

Enclosed is the modified permit for your facility. The cover sheet from the previous permit should be inserted. Also, in Attachment IV-5, Plates 1, 2 and 3 showing the design of the groundwater recovery trenches at the facility should be inserted.

Should you have any questions, please contact me at 961-5141.

Sincerely,

Bruce Ferguson

Bruce Ferguson
Hazardous Waste Division

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

August 1, 1995

Mr. Steve Ladner
Kerr-McGee Chemical Corporation
P. O. Box 25861
Oklahoma City, Oklahoma 73125

Re: Permit Modification
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Ladner:

The above referenced permit modification was placed on public notice from May 22 until July 7, 1995. One request for information was received, however, no comments were submitted. Subsequently, on July 25, 1995, the Mississippi Environmental Quality Permit Board approved the modification of the permit. Enclosed is a disk which contains the permit language, Attachment III-2 and Attachment III-3. A hard copy of the permit in its entirety is being forwarded to Mr. Tony Helms, with the exception of Plates 1, 2 and 3 showing the design of the groundwater recovery trenches at the facility.

Should you have any questions, please contact me at (601) 961-5141.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

MEMORANDUM

To: Pamela Layton

From: Jerry Banks

Date: July 17, 1995

Subject: Permit Board Agenda
July 25, 1995

HAZARDOUS WASTE PERMIT MODIFICATION

FACILITY	COUNTY	PERMIT NO.
Kerr-McGee Chemical	Lowndes	MSD990866329

APPROVED
7/25/95

5015 Live Oaks Drive
Long Beach, MS 39560
May 26, 1995

Mr. Russ McLean
Mississippi Department of Environmental Quality
Southport Center Building
2380 Highway 80 West
Jackson, Mississippi 39204

Dear Mr. McLean,

I am writing to request copies of the fact sheets and draft hazardous waste management permits submitted by the Kerr-McGee Chemical Corporation for the modification of the Mississippi Hazardous Waste Post-Closure and Corrective Action Permit for their facility in Columbus, Mississippi. The public notice was given on May 22, 1995 for authorization by the MDEQ and the EPA.

Thank you for your consideration of this request.

Sincerely,

T. J. Becnel

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

April 28, 1995

Mr. Bruce Ferguson
Environmental Engineer
Mississippi Department of
Environmental Quality
Office of Pollution Control
P.O. Box 10385
Jackson, MS 39289-0385

Re: Permit Modification
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Ferguson:

Kerr-McGee Chemical Corporation (KMCC) has reviewed the proposed modifications for the above referenced facility. The permit modifications are acceptable. At this point, KMCC will be waiting for the completion of the HSWA permit by the EPA, and the subsequent public notification of both permits.

Thank you for your time and consideration in this matter. If you require any further information or have additional questions, please feel free to contact me at (405) 270-2625.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: Russ McLean, USEPA Region IV
Tony Helms, KMCC-Columbus
N.E. Bock, KMCC

FAX

To: Clarion Ledger Legal Advertising Phone: Fax: 961-7286	From: Bruce Ferguson Office of Pollution Control P.O. Box 10385 Jackson, MS 39289-0385 Phone: 601/961-5141 Fax: 601/961-5741

Date: 5/15/95, 1995 ☐ Routine ☐ Priority

Number of pages, including this one: 5

Message:

FAX

To: WACR - AM/FM	From: Derek Ferguson Office of Pollution Control P.O. Box 10385 Jackson, MS 39289-0385
Phone:	Phone: 601/961-5141
Fax: 328-1054	Fax: 601/961-5741

Date: 5/15 ,1995 ☐ Routine ☐ Priority

Number of pages, including this one: 3

Message:

FAX

To: COMMERCIAL DISPATCH LEGAL NOTICES E Phone: Fax: 329-8937	From: BRUCE FERGUSON Office of Pollution Control P.O. Box 10385 Jackson, MS 39289-0385 Phone: 601/961-5141 Fax: 601/961-5741

Date: 5/11, 1995 ☐ Routine ☐ Priority

Number of pages, including this one: 5

Message:

Comsh

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

September 9, 1994

CERTIFIED MAIL NO. Z 765 989 209

Mr. Tony Helms
Kerr-McGee Chemical Corporation
P.O. Box 906
Columbus, MS 39701

Re: Notice of Apparent Violation
Letter of July 25, 1994
Kerr-McGee Chemical Corp.
Columbus, Mississippi

Dear Mr. Helms:

The Mississippi Office of Pollution Control (Office) has received and reviewed your August 3, 1994, response to the above referenced notice. Upon review of your response, the Office has determined that the following violation of the Mississippi Hazardous Waste Management Regulations (MHWMR) did not exist:

1. MHWMR 262.11 - A person who generates a solid waste, as defined in MHWMR 261.2, must determine if the waste is a hazardous waste.

The Office has determined that the following violation did exist:

1. MHWMR 264.573(c) - After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased.

The Office has evaluated this violation in accordance with the "Enforcement Response Policy" and has determined that a monetary penalty is appropriate. The monetary penalty was calculated to be $1,499 in accordance with the "1990 RCRA Civil Penalty Policy".

Should you disagree that a monetary penalty is appropriate or wish to discuss how the penalty was calculated, please contact me within 2 weeks of receiving this letter to schedule a meeting.

Otherwise, an Agreed Order stipulating the payment of the above said sum will be mailed to you for signature by the appropriate corporation official.

Please contact me at 961-5141 if you have any questions or comments.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

BF:gd

KERR-McGEE CHEMICAL CORPORATION
P.O. BOX 906 • COLUMBUS, MISSISSIPPI 39703-0906

August 3, 1994

Mr. Bruce Ferguson
Environmental Engineer
Mississippi Department of Environmental Quality
P. O. Box 10385
Jackson, MS 39289-0385

Re: Compliance Evaluation Inspection - July 14, 1994

Dear Mr. Ferguson:

As noted in your inspection report on July 25, 1994, you identified two alleged violations of the Mississippi Hazardous Waste Management Regulations (MHWMR). The alleged violations were for the following regulations:

1) MHWMR 264.573 (k) - After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. During the inspection of a charge of treated wood which has been removed from the drip pad was observed to be dripping.

2) MHWMR 262.11 - A person who generates a solid waste, as defined in MHWMR 261.2, must determine if the waste is a hazardous waste. A hazardous waste determination apparently has not been conducted on the spent solvent from the maintenance parts washer.

Kerr-McGee Chemical Corporation (KMCC) has reviewed both alleged violations, KMCC wishes to comment on each alleged violation.

Response to Alleged Violation 1 - The person inspecting the wood for drippage will mark each charge of wood before it is moved from the pad. Additional training with all personnel has been completed to ensure this does not happen again. Each charge of treated wood is certified that drippage has ceased prior to removal from the drip pad. This certification is documented after each charge. KMCC has even modified the production process by extending a vacuum cycle at the end of the treating process to minimize any drippage out of the treating cylinder. As part of personnel training, KMCC reviews the procedures with the appropriate personnel to ensure wood is not pushed off the drip pad until drippage has ceased. Find attached the certification form we used. On the date of the inspection the drippage from the treated charge was cleaned up according with the storage yard contingency plan.

Response to Alleged Violation 2 - The chemical in question, called "Perpetrator", is used in the maintenance department as a parts washer. The chemical has never been disposed of or abandoned since the initial filling of the parts washer. Process knowledge has determined that this is not a hazardous waste; however, tests will be conducted to verify that this is not a hazardous waste. This will provide verification that appropriate process knowledge was used and is not a violation of MHWMR 262.11. Based on the results of characteristic testing this material will be handled accordingly.

Conclusion:

KMCC will continue to provide training to all drip pad and treated tie storage personnel concerning drippage minimization and the appropriate response as detailed in the treated tie storage drippage contingency plan. KMCC will also test the "Perpetrator" chemical for hazardous waste classification to document that this is not a violation.

KMCC is always appreciative of the Department's suggestions to improve our hazardous waste management program. Inspections are an ideal opportunity to get feedback on our program and continually improve our hazardous waste management program.

If you need further information, please contact me at (601) 328-7551. Thank you for your time and consideration of this matter.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

A. N. Helms

A. N. Helms
Plant Manager

ANH/tjj

cc: S. A. Ladner, KMCC
R. P. Michel, KMCC
N. E. Bock, KMCC

FIGURE 3-4

DRIPPAGE CERTIFICATION REPORT
KERR-McGEE CHEMICAL CORPORATION, FOREST PRODUCTS DIVISION
40 CFR, Subpart W

Charge Number	Charge Pulled (Date)	Charge Pulled (Time)	Released (Date)	Released (Time)	Time on Pad (Hour)	Name (Print)	Signature
671	7-10	7:00	✓	8:00	1 HR	CHARLES SWANN	
672	7-11	7:30	✓	9:00	1½		
673	7-11	8:00	✓	9:30	1½		
674	7-10	6:30	✓	7:30	1		
675	7-12	7:30	✓	8:30	1		
676	7-12	7:00	✓	8:30	1½		
677	7-12	8:00	✓	9:00	1		
678	7-12	19:30	7-13	6:00	10		
679	7-12	20:00	7-13	6:30	10½		
680	7-12	20:00	7-13	6:00	10		
681	7-13	7:00	✓	8:30	1½		
682	7-13	7:30	✓	8:30	1		
683	7-13	8:30	✓	10:00	1½		
684	7-13	20:00	✓	6:00	10		
685	7-13	20:00	7-14	7:00	11		
686	7-13	21:30	7-14	6:30	9		
* 687	7-14	8:30	✓	10:30	2		
688	7-14	9:00	✓	11:00	2		

* 687 Charge 687 pushed back on pad for 3 extra hours

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

August 1, 1994

Mr. Bruce Ferguson
Environmental Engineer
Mississippi Department of
Environmental Quality
Bureau of Pollution Control
P.O. box 10385
Jackson, Mississippi 39289

Re: Post-Closure and Groundwater Corrective Action
Permit HW-90-329-01
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Ferguson:

As per your request, enclosed please find the following material submitted as a modification of the Part B permit application for the Kerr-McGee Chemical Corporation (KMCC) Columbus, Mississippi facility:

1) A description of the Corrective Action Program as required by MHWMR 270.14(c) (8).

2) An amended contingency plan as required by MHWMR 264.54 and;

3) The most recent post-closure cost estimate as required by MHWMR 270.14 (b)(16).

Suggested groundwater monitoring modifications are included in the corrective action report in boldface type. Please review this submittal, and if you have any questions, feel free to contact me at (405) 270-2625.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

cc: T. Helms-Facility
N. Bock

FOREST PRODUCTS

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

July 25, 1994

CERTIFIED MAIL NO. Z 765 989 226
Mr. Tony Helms
Kerr-McGee Chemical Corporation
Forest Products Division
P. O. Box 906
Columbus, Mississippi 39701

Re: Compliance Evaluation Inspection
July 14, 1994
Kerr-McGee Chemical Corporation
Columbus, Mississippi

Dear Mr. Helms:

Enclosed please find an inspection report and checklist that was completed as a result of the above referenced inspection. This inspection revealed the following apparent violation(s) of the Mississippi Hazardous Waste Management Regulations (MHWMR) and Mississippi Hazardous Waste Permit No. HW-90-329-01:

1) MHWMR 264.573(k) - After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased.

2) MHWMR 262.11 - A person who generates a solid waste, as defined in MHWMR 261.2, must determine if that waste is a hazardous waste.

We request that you respond to these apparent violation(s) within 10 days of receipt of this letter. This response should contain: (1) actions that have been taken to correct the violation(s), (2) schedule for correcting the violation(s), or (3) reasons that you believe the alleged violation(s) did not exist. The Office of Pollution Control will review this information before determining if further action including a penalty is warranted. Section 17-17-29 of the Mississippi Code Annotated (Supp. 1991) allows assessments of penalties not more than $25,000 per day per violation. Failure to submit this information may result in enforcement action.

If you have any questions, do not hesitate to contact me at (601) 961-5141.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

Enclosures
pc: Mr. James S. Kutzman, USEPA

■ Supervisor suggests halting 16th Section land use payment

By Cathy Hayden
Clarion-Ledger Staff Writer

Jackson School Board members greeted Hinds County Supervisor George Smith with good-natured chuckles but no support Monday night when he asked them to back special state legislation waiving a $14,000 annual fee paid to the district for a land lease.

With a grin, Smith said he knew the district has had recent financial reversals. He did not press board members for a vote, and they didn't oblige him with one.

Supervisors pay the district the annual fee for 16th Section land on which the Hinds County Youth Detention Center is being built on East McDowell Road. By state law, board members cannot now waive the fee, but Smith wants to ask legislators for an exception.

"I realize the financial woes you have," he told board members. "I understand the shortfalls. We have that same thing."

Since last fall, the school district has been hit with several tax collection shortfalls because of a combination of mistakes, tax protests and a bankruptcy restructuring to the tune of about $5 million.

Board members are borrowing money to make up a shortfall from the previous year that will require a tax hike in October.

"Your timing is just bad," said board president Lynn Evans, bringing laughter from the audience.

However, Smith told board members the school district and the Youth Detention Center are serving the same general population.

"It's the same kids we're attempting to service in the public schools but they may be on the wrong track, and we're trying to put them on the right track," he said.

Evans said the district is already paying for the education of the students at the current Youth Detention Center on Silas Brown as well as any eligible students at the Hinds County Detention Center in Raymond, which houses adults and juveniles being tried as adults.

Ron Sellers, deputy superintendent, said the district has four teachers at the Youth Detention Center, two in Raymond and a secretary. That costs the district about $175,000 annually, he said.

"The money we spend is quite a bit more than $14,000," Evans said.

She also said that legally the county is liable for that expense and not the district.

Smith said he doesn't plan to pursue the legislation without the support of Jackson School Board members.

Superintendent Jayne Sargent said she doesn't foresee a vote on Smith's request. "I personally don't," she said.

In other business, board members approved a contract for $9,905 with Ridgeland-based Burns Cooley Dennis Inc. to collect soil samples and provide technical advice at Johnson Elementary to determine what can be done about a two-story, 29-classroom wing that has severe structural damage.

The 1964 wing connected to the 1957 main structure is breaking apart and threatens to collapse.

not in the best interests of the majority of citizens," said 2nd District U.S. Rep. Bennie Thompson.

Experts say Mississippi has an open primary system now, because voters can choose between political parties when they go to vote. Voters may not cross party lines between primaries and runoffs, however.

The push, with several bills introduced this session in the Legislature, has been for a change to a blanket primary, where all candidates are listed on one ballot.

Alaska, Louisiana, Washington and California are the only states with blanket primaries now.

Secretary of State Eric Clark, who favors blanket primaries, told caucus members he was for doing anything that increases voter participation. "I think we ought to look for ways to maximize people participating," Clark said.

has said the party will not comment until officials have a chance to see the legislation.

Rep, Bill Denny, R-Jackson, who chaired the House Elections and Apportionment Committee last term, said open primaries could weaken the state's party system.

"There wasn't a lot said I'll disagree with. I think the idea of a blanket primary, as it has been proposed, homogenizes the parties. In this state now we have two strong political parties and I think that's very helpful for the state."

Gov. Ronnie Musgrove said any change approved must stand a good chance of winning approval from the Justice Department. The Justice Department must clear any changes to Mississippi's voting laws to ensure they do not harm minority voting in the state.

The subcommittee plans to forward a report on the hearing to the full black caucus.

Columbus church files $100M lawsuit against Kerr-McGee

■ Suit claims plant allowed contamination of church property

The Associated Press

Attorneys for a Columbus church have filed a $100 million lawsuit that claims creosote from a nearby forest products company has contaminated church property.

Orlando Richmond, an attorney for Maranatha Faith Center, said he filed the suit against Kerr-McGee Inc. on Friday in Hinds County Chancery Court.

The suit claims the Oklahoma-based chemical and gas company, which employs 40 at its Columbus plant, engaged in "willful and wanton property contamination" by allowing the known carcinogen to be washed onto church land.

"As the complaint points out, we intend to establish that irreparable damage has been done to Maranath Faith Center and its property," Richmond said Monday in a statement.

Kerr-McGee spokeswoman Debbie Schramm denied the allegations, saying the company has maintained an unblemished environmental track record over its 35 years in Columbus.

"We are very proud of our operations there," Schramm said Monday. "It's Kerr-McGee's policy to place a high priority on environmental safety. We don't believe the plant has adversely affected anyone's health or contaminated any residents' property."

The company manufactures and treats railroad ties in Columbus. It is located about a mile from church property, an attorney's spokesman said.

Also named as defendants in the suit are Moss-American Inc., T.J. Moss Tie Company, American Creosoting Inc., Sanderson plumbing Products Inc. , Columbus Cemetery and Investment Company and the Mississippi Department of Environmental Quality.

Los Angeles attorney Johnnie Cochran and Mississippi attorney Wilbur O. Colom are co-counsels for the church.

Richmond said church officials discovered soil contamination last year when they began excavating part of its 6.4 acres for expansion.

Richmond said the discovery of creosote stopped construction and destroyed future growth plans at the church.

The Environmental Protection Agency has determined that exposure to creosote may cause cancer.

THE CLARION LEDGER
JACKSON, MS
TUESDAY FEB. 22, 2000

FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

July 1, 1994

Mr. Tony Helms
Kerr-McGee Chemical Corporation
P. O. Box 906
Columbus, MS 39701

Re: Sawed Ends from Creosote Treated Ties

Dear Mr. Helms:

In regards to your question of June 29, 1994, "Are the sawed ends from creosote treated ties a listed hazardous waste?", the Mississippi Office of Pollution Control offers the following response. Wastes generated from creosote treated products after the requirements of MHWMR 265.444 have been met do not carry the F034 listing. These wastes could, however, be subject to regulation based on the toxicity leaching procedure.

Should you have any questions, please contact me at 961-5141.

Sincerely,

Bruce Ferguson

Bruce Ferguson, P. E.,
Hazardous Waste Division

BF:gd

Comp

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

October 19, 1993

Mr. Bruce Ferguson
State of Mississippi
Department of Environmental Quality
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Kerr-McGee Chemical Corporation - Forest Products Division
Columbus, Mississippi Facility
Administrative Order No. 1636-89

Dear Mr. Ferguson:

As per our phone conversation on October 16, 1993 concerning the July 27, 1993 written request for the proposed dissolution of the Administrative Order, Kerr-McGee Chemical Corporation - Forest Products Division (KMCC-FPD) agrees to submit permit modifications to supplement the Administrative Order and to update the permit to comply with recently installed corrective action measures. As per our agreement, this work will be performed during the fourth quarter, 1994.

Further, as per our conversation, KMCC-FPD is no longer required to submit Bi-monthly reports to you as part of the Administrative Order.

In addition, KMCC-FPD agreed to meet during the first quarter, 1994 to discuss the proposed modifications.

If you have further questions or need additional information, please feel free to call me at (405) 270 - 2625.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Stephen A. Ladner

Stephen A. Ladner
Staff Environmental Specialist

cc: T. Helms - Facility
N. Bock
R. Widman
J. Poor

FOREST PRODUCTS

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

August 30, 1993

Mr. Bruce Ferguson
RCRA TSD Coordination
Mississippi Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi ~~3978~~9-0385

Re: Kerr-McGee Chemical Corporation Forest Product Division
Columbus, Mississippi
Bimonthly Progress Report - Consent Order 1636-89
September 1, 1993

Dear Mr. Ferguson:

The following bimonthly progress report is submitted in compliance with the August 21, 1989 agreed consent order between Kerr-McGee Chemical Corporation, Forest Product Division (KMCC-FPD) and the Mississippi Department of Environmental Quality (MDEQ).

The corrective action program continues to operate effectively. To ensure that draw-down of the aquifer occurs from pumping the recovery trenches and that the resulting hydraulic barrier is preventing further migration of contaminants, piezometers were placed around Trench 1 and Trench 2 (Attachment 1). A total of ten piezometers were installed during the week of July 12. Eight piezometers were installed around Trench 1, south of the process area. Two additional piezometers were installed around Trench 2. Monthly water levels will be measured in these new piezometers and potentiometric maps will be constructed. The maps will be included in the annual and bi-annual reports.

Additionally, during the week of July 12, damaged monitor wells were repaired and maintained (Attachment A). In response to MDEQ comments regarding the Compliance Evaluation Inspection, KMCC-FPD agreed to evaluate the integrity of damaged monitor well CMW19. The well pad had been rotated by heavy equipment. CMW19 was repaired by removing the pad and replacing the upper 2.5′ of casing. The monitor well is now protected by a flush-mounted meter box. Maintenance was also performed on wells CMW52, CMW56 and CMW1AR.

A new stainless steel monitor well, CMW66, was installed as a replacement for CMW53. CMW53, situated in the re-located cemetery road, was plugged and abandoned on July 15, 1993.

KMCC-FPD awaits MDEQ response to the July 27, 1993 correspondence which reviewed the requirements of Administrative Order No. 1636-89. KMCC-FPD believes that the Order requirements have been fulfilled and that the Order should be dissolved.

The Third Quarter 1993 corrective action groundwater monitoring took place during the week of August 9, 1993. The teflon coated bailor wire in each dedicated well was examined for evidence of deterioration. The wire was replaced. Upon receipt, the analytical summary results will be submitted in the November bi-monthly report for your review.

If you have any questions regarding the bimonthly report or the facility's waste management program, please contact me at (405) 270-2394.

Sincerely,

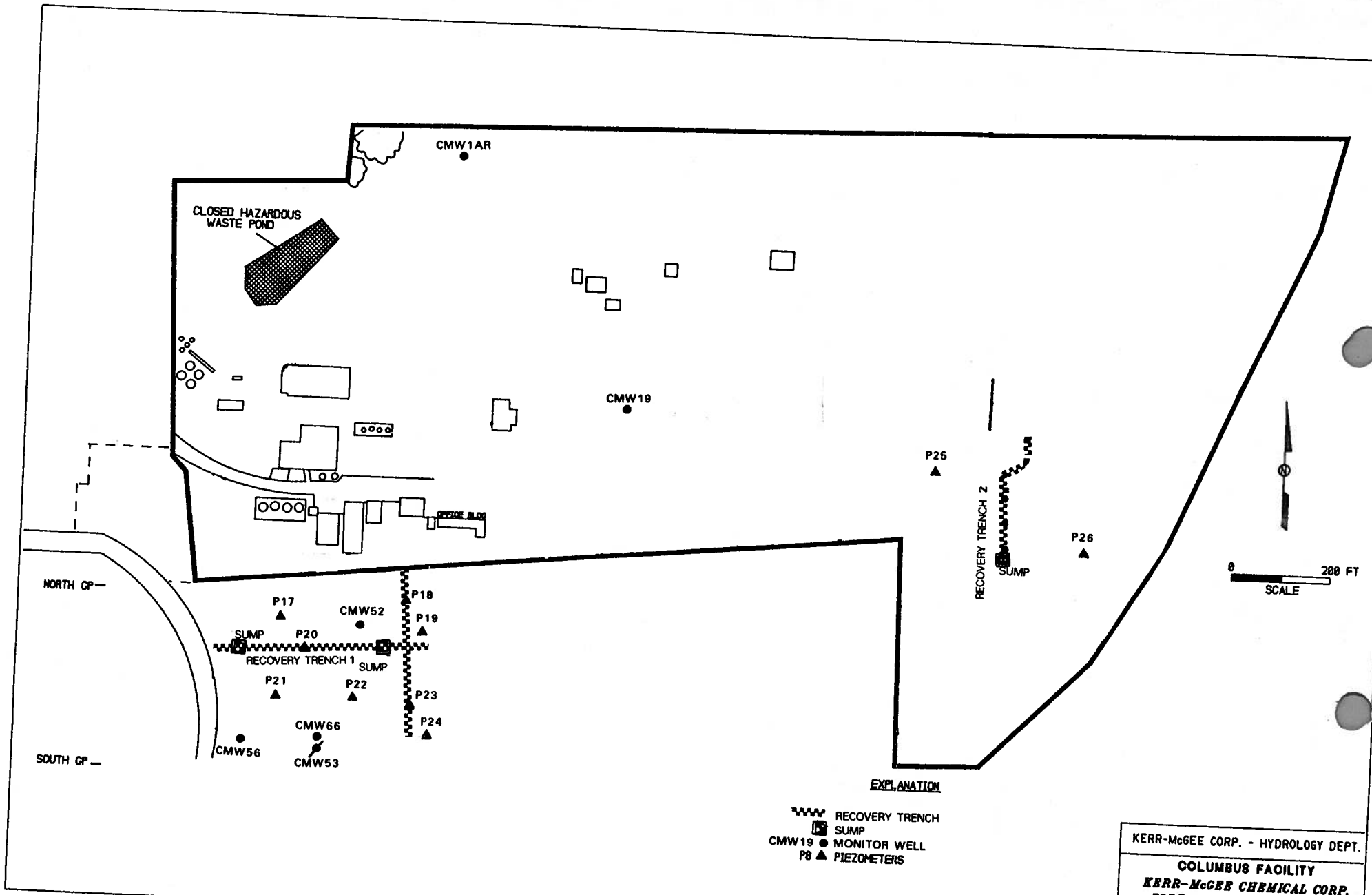
KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Stephen A Ladner

STEPHEN LADNER
Staff Environmental Specialist

SL/JP

cc: J.J. Getz
J.M. Poor
N. Bock



ATTACHMENT A: LOCATION OF 7/12/93 INSTALLED PIEZOMETERS AND REPAIRED MONITOR WELLS

DIVISION OF HAZARDOUS WASTE
REVIEWED BY SD7
DATE 9-7-93
COMMENTS CERCLA 9-7-93
EPA

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

July 27, 1993

Mr. Bruce Ferguson
Project Officer
Mississippi Department of Natural Resources
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Administrative Order No. 1636-89

Dear Mr. Ferguson:

Administrative Order No. 1636-89 was issued in 1989 to resolve and govern the administration of certain groundwater concerns expressed by the Mississippi Department of Natural Resources (MDNR) about the Kerr-McGee Chemical Corporation, Forest Products Division (KMCC-FPD), facility located in Columbus, Mississippi. With the recent corrective action and assessment work completed at the facility, a review of this Order seems warranted.

Based on our review of the recently completed work documented as submittals to the MDNR, KMCC-FPD believes that the requirements of the Administrative Order have been fulfilled and that the Order should be dissolved.

Enclosed please find, as an attachment, a copy of the aforementioned Order. In addition, this letter contains a discussion of each item in the Order with documentation of how KMCC-FPD has fulfilled each concern.

If you have any questions, please feel free to contact me at 405/270-2625. Thank you for your time and consideration in reviewing this request.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Stephen A. Ladner
Staff Environmental Specialist

SAL/s

cc: N. E. Bock
J. J. Getz/A. N. Helms, Columbus Facility
J. L. Poor

FOREST PRODUCTS

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385
(601) 961-5171

September 11, 1989

RECEIVED
SEP 13 19..

CERTIFIED MAIL NO. P 962 285 032

Kerr-McGee Chemical Corporation
Kerr-McGee Center
Oklahoma City, Oklahoma 73125

Attention Mr. N. E. Bock, Staff Environmental Specialist

Dear Sir:

In order to settle certain environmental issues regarding your Columbus, Mississippi facility, you have agreed to the conditions of Administrative Order No. 1636-89. As requested, two copies of the executed order are enclosed.

If you have questions about this matter, please contact Mr. Steve Spengler at telephone #601/961-5171.

Sincerely,

Charles H. Chisolm
Bureau Director

CHC:mh

Enclosures

CC K. SAFFEL
M. LOGAN

BEFORE THE MISSISSIPPI COMMISSION
ON ENVIRONMENTAL QUALITY

IN THE MATTER OF:

MISSISSIPPI COMMISSION ON
ENVIRONMENTAL QUALITY

COMPLAINANT

VS.

ORDER NO. 1636 89

KERR-McGEE CHEMICAL CORPORATION
FORREST PRODUCTS DIVISION
COLUMBUS, MISSISSIPPI
MSD990866329

RESPONDENT

CONSENT ORDER

Under the authority of Section 49-2-13, Mississippi Code of 1972, the above styled cause came on this date for consideration and the Executive Director, having heard and considered the same, finds as follows:

1.

The Respondent, Kerr-McGee Chemical Corporation, owns and operates a wood treating facility located in Lowndes County, Columbus, Mississippi. The provisions of laws of this State govern the disposal

4.

Respondent has instituted a groundwater assessment program, but has not completed the program. Respondent has not defined the full vertical and horizontal extent or rate of flow of the contaminant plume as required by MHWMR 265.93.

5.

Respondent has not identified the concentration of each MHWMR Part 264 Appendix IX constituent and has not delineated the full extent of groundwater contamination as required by MHWMR 270.14(c)(i) and (ii).

Premises considered, the Executive Director finds that Respondent must develop and submit the work outlined below to further delineate the presence of contamination.

Without admitting the truth of any violation in this Agreed Order, Respondent, Kerr-McGee Chemical Corporation, hereby agrees to carry out the following activities:

A. Identify the uppermost aquifer and aquifers hydraulically interconnected beneath the facility as required by MHWMR 270.14(c)(2). This must include an evaluation of the Eutaw [illegible] that adequately demonstrates whether it is [illegible] alluvial

NOTWITHSTANDING any provision of this Order to the contrary, the parties reserve any and all rights they may have to raise at any time all issues of law and fact in any and all proceedings related to matters herein.

SO AGREED AND CONSENTED TO, this the 8th day of September 1989.

KERR McGEE CHEMICAL CORPORATION

FORM APPROVED
pvd
28

BY: C. L. Marshall

MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

BY: J. J. Palmer, Jr.
J. J. PALMER, JR.
EXECUTIVE DIRECTOR

DISCUSSION

ITEM 4 - Definition of the vertical and horizontal extent or rate of flow of the contaminant plume as required by MHWMR 265.93.

Alluvial Formation (Horizontal Extent)

Plume maps illustrating the horizontal extent of contamination are presented in Biannual Report submitted on March 1 and October 1 every year. The existing monitoring well network has defined the horizontal extent of the contaminant plume.

In addition, groundwater flow velocities are calculated and submitted for each quarter, providing a quarterly measurement of the velocity of the plume. The most recent submittal documenting this information is 1992 Annual/Semiannual Corrective Action Performance Evaluation and Groundwater Monitoring Report (February 26, 1993).

Eutaw Formation (Vertical Extent)

The vertical extent of impact at the facility has been defined by the installation of six groundwater monitoring wells completed in the Eutaw formation. The impact is confined to on-site locations and has been delineated both laterally and vertically by a monitor well network of interior plume wells and both upgradient and downgradient wells.

The Evaluation of the Corrective Action in the Eutaw Formation report provides a detailed description of the assessment of the Eutaw and vertical impact. This report, submitted on March 8, 1990, and subsequent annual reports have calculated the velocity of the groundwater/dissolved plume in the Eutaw formation.

ITEM 5 - Respondent has not identified the concentration of each MHWMR Part 264 Appendix IX constituent and has not delineated the full extent of groundwater contamination as required by MHWMR 270.14 (c) (i) and (ii).

A. Identify the uppermost aquifer and aquifers hydraulically interconnected beneath the facility.

A pump test performed on the Eutaw formation in January of 1991 determined that the Eutaw formation is hydraulically interconnected with the overlying Alluvial aquifer. The hydraulic conductivity derived from the data generated by the pump test has been reported in the subsequent annual reports. The actual test data was included as Appendix F of the September 30, 1992 Semi-anual Report.

B. Identify the concentrations of each Appendix IX constituent and delineate the existence and extent of groundwater contamination in both the Alluvial and Eutaw formations.

Appendix IX constituents were analyzed in Monitor wells CMW1AR, CMW6, CMW7, and CMW8 for the 3rd Quarter 1989 groundwater compliance monitoring. The results of this analyses were reported in the 1989 Annual Report. The Hazardous Waste Permit HW-90-329-01 was issued on September 11, 1990. Table IV-I of the permit states that Appendix IX constituents will not be required until 90 days prior to the well meeting the Groundwater Protection Standards (GWPS). The Permit and Consent Order are in conflict, and the Permit should supersede the Consent Order.

Plume maps were presented in Groundwater Quality Assessment Report (February 28, 1990) and are also presently in the subsequent Annual Reports. The latest contaminant plume map depicting full delineation was submitted as Figure 5 in the 1992 Annual/Semiannual Corrective Action Performance Evaluation and Groundwater Monitoring Report (February 26, 1993).

C. Submit by February 28, 1990, a groundwater quality assessment report for on-site groundwater contamination that addresses paragraphs A and B.

The report satisfying this requirement was entitled Groundwater Assessment Report and was submitted on February 28, 1990.

D. Submit an addendum to the previously submitted RCRA Part B Permit Application. Submit bi-monthly progress reports on the on-site groundwater quality corrective action.

Post-Closure Permit Application, Part B was submitted April 12, 1990. Bi-monthly progress reports have been submitted since September 1, 1989.

E. Submit an addendum to the previously submitted Part B Application which incorporates off-site groundwater quality assessment and a plan for off-site corrective action. Submit P bi-monthly progress reports on the on-site groundwater quality corrective action.

The addendum, Post-Closure Permit Application, Part B Volume II was submitted on October 30, 1990. Bi-monthly progress reports have been submitted since September 1, 1990.

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

June 25, 1993

Mr. Bruce Ferguson
RCRA TSD Coordination
Mississippi Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39789-0385

Re: Kerr-McGee Chemical Corporation Forest Product Division
Columbus, Mississippi
Bimonthly Progress Report - Consent Order 1636-89
July 1, 1993

Dear Mr. Ferguson:

The following bimonthly progress report is submitted in compliance with the August 21, 1989 agreed consent order between Kerr-McGee Chemical Corporation, Forest Product Division (KMCC-FPD) and the Mississippi Commission on Environmental Quality.

KMCC is in receipt of the June 14, 1993 Department of Environmental Quality letter discussing an informal meeting scheduled July 20, 1993 in Jackson, Mississippi to discuss wood preserving and drip pads regulations. KMCC plans to attend this meeting.

The 2nd Quarter 1993 corrective action groundwater monitoring took place during the week of May 4, 1993. The data summary results have been enclosed for your review.

The Mississippi DEQ Compliance Evaluation Inspection was conducted by Mr. Bruce Ferguson on May 5, 1993 during the 2nd Quarter sampling. KMCC-FPD responded June 17, 1993 to the compliance evaluation inspection comments (dated June 11, 1993) on the conditions which DEQ noted as needing attention.

Installation of piezometers around Trench 1 (located in cemetery) has been scheduled for the week of July 12, 1993. In addition, monitor well CMW19 will be repaired.

KM FOREST PRODUCTS

The third quarter groundwater sampling has been scheduled for the second week in August, in accordance with the approved analytical schedule.

If you have any questions regarding the bimonthly report or the facility's waste management program, please contact me at (405) 270-2394.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

STEVE LADNER
Staff Environmental Specialist

NB/JP/dw

cc: J. J. Getz
J. M. Poor
J. H. Bull

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 05/28/93
PAGE: 1

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL93

Sample Point->		GWMCME3		GWMCMW22		GWMCMW58		GWMCMW63		GWMCMW62		GWMCMW61	
Sample Date->		05/06/93		05/06/93		05/06/93		05/06/93		05/06/93		05/06/93	
SWLO#->		13640.01		13640.02		13640.03		13640.04		13640.05		13640.06	
Parameters	Units												
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DIMETHYLPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DINITROPHENOL	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PENTACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	10	U	10	U	10	U	10	U	10	U	3.00	J
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	12	
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
NAPHTHALENE	ug/l	10	U	10	U	10	U	10	U	10	U	4.00	J
PHENANTHRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(A)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
CARBAZOLE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(A)PYRENE	ug/l	-		-		10	U	-		-		10	U
BTEX													
BENZENE	ug/l	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
XYLENE (TOTAL)	ug/l	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
POLYNUCLEAR AROMATIC HYDROCARBONS													
NAPHTHALENE	ug/l	-		-		-		-		-		-	

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
* See enclosure for additional qualifiers

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point-> / Sample Date-> / SWLO#->		GWMCME3 05/06/93 13640.01	GWMCMW22 05/06/93 13640.02	GWMCMW58 05/06/93 13640.03	GWMCMW63 05/06/93 13640.04	GWMCMW62 05/06/93 13640.05	GWMCMW61 05/06/93 13640.06
Parameters	Units						
ACENAPHTHYLENE	ug/l	-	-	-	-	-	-
ACENAPHTHENE	ug/l	-	-	-	-	-	-
MISC PARAMETER							
PHENOLS	mg/l	-	-	-	-	-	-
FIELD CONDUCTIVITY	um/cm	443	204	500	154	226	204
FIELD CONDUCTIVITY	um/cm	450	202	501	163	229	202
FIELD CONDUCTIVITY	um/cm	458	204	505	165	231	204
FIELD CONDUCTIVITY	um/cm	456	224	515	172	251	224
FIELD PH	s.u.	7.31	5.28	6.06	5.12	6.02	6.24
FIELD PH	s.u.	7.34	5.25	6.07	5.15	6.03	6.28
FIELD PH	s.u.	7.39	5.26	6.07	5.16	6.04	6.23
FIELD PH	s.u.	7.39	5.27	6.08	5.20	6.05	6.22
FLOATERS	ft	0.00	0.00	0.00	0.00	0.00	0.00
SINKERS	ft	0.00	0.00	0.00	0.00	0.00	0.00

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 05/28/93
PAGE: 3

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL93

Sample Point-> / Sample Date-> / SWLO#-> / Parameters	Units	GWMCMW3 05/06/93 13640.07	GWMCMW9 05/06/93 13640.08	GWMCMW10 05/06/93 13640.09	GWMCME4 05/05/93 13640.10	GWMCMW6 05/05/93 13640.11	GWMCMW7 05/05/93 13640.12
ACID EXTRACTABLES							
2-CHLOROPHENOL	ug/l	-	-	-	10 U	10 U	10 U
2,4-DIMETHYLPHENOL	ug/l	-	-	-	2.00 J	10 U	10 U
2,4-DINITROPHENOL	ug/l	-	-	-	50 U	50 U	50 U
P-CHLORO-M-CRESOL	ug/l	-	-	-	10 U	10 U	10 U
PENTACHLOROPHENOL	ug/l	-	-	-	6.00 J	10 U	10 U
PHENOL	ug/l	-	-	-	10 U	10 U	10 U
2,4,6-TRICHLOROPHENOL	ug/l	-	-	-	10 U	10 U	10 U
2,3,4,6-TETRACHLOROPHENOL	ug/l	-	-	-	10 U	10 U	10 U
BASE/NEUTRAL EXTRACTABLES							
ACENAPHTHYLENE	ug/l	-	-	-	7.00 J	10 U	10 U
BENZO(A)ANTHRACENE	ug/l	-	-	-	10 U	10 U	10 U
BENZO(B)FLUORANTHENE	ug/l	-	-	-	10 U	10 U	10 U
BENZO(K)FLUORANTHENE	ug/l	-	-	-	10 U	10 U	10 U
DIBENZ(A,H)ANTHRACENE	ug/l	-	-	-	10 U	10 U	10 U
FLUORANTHENE	ug/l	-	-	-	1.00 J	10 U	10 U
INDENO(1,2,3-CD)PYRENE	ug/l	-	-	-	10 U	10 U	10 U
NAPHTHALENE	ug/l	-	-	-	840 D	10 U	5.00 J
PHENANTHRENE	ug/l	-	-	-	18	10 U	10 U
BENZO(A)PYRENE	ug/l	-	-	-	10 U	10 U	10 U
CARBAZOLE	ug/l	-	-	-	170	10 U	10 U
BENZO(A)PYRENE	ug/l	-	-	-	-	-	-
BTEX							
BENZENE	ug/l	-	-	-	25 U	1.00 U	1.00 U
XYLENE (TOTAL)	ug/l	-	-	-	25 U	1.00 U	1.00 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
NAPHTHALENE	ug/l	25 U	-	-	-	-	-

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
* See enclosure for additional qualifiers

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL93

Sample Point-> / Sample Date-> / SWLO#-> / Parameters	Units	GWMCMW3 05/06/93 13640.07	GWMCMW9 05/06/93 13640.08	GWMCMW10 05/06/93 13640.09	GWMCME4 05/05/93 13640.10	GWMCMW6 05/05/93 13640.11	GWMCMW7 05/05/93 13640.12
ACENAPHTHYLENE	ug/l	25 U	-	-	-	-	-
ACENAPHTHENE	ug/l	25 U	-	-	-	-	-
MISC PARAMETER							
PHENOLS	mg/l	0.0080	-	-	-	-	-
FIELD CONDUCTIVITY	um/cm	369	-	-	235	331	312
FIELD CONDUCTIVITY	um/cm	367	-	-	237	330	315
FIELD CONDUCTIVITY	um/cm	373	-	-	242	331	322
FIELD CONDUCTIVITY	um/cm	369	-	-	309	344	328
FIELD PH	s.u.	6.00	-	-	7.88	6.16	6.04
FIELD PH	s.u.	5.98	-	-	7.82	6.11	6.07
FIELD PH	s.u.	6.00	-	-	7.81	6.18	6.10
FIELD PH	s.u.	6.02	-	-	7.87	6.21	6.11
FLOATERS	ft	0.00	0.00	0.00	0.00	0.00	0.00
SINKERS	ft	0.00	0.32	0.00 T	0.00	0.00	0.00

U: ANALYZED BUT NOT DETECTED
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Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point->		GWMCMW8		GWMCME5		GWMCMW16		GWMCMW14		GWMCME6		GWMCMW1AR	
Sample Date->		05/05/93		05/06/93		05/06/93		05/05/93		05/05/93		05/05/93	
SWLO#->		13640.13		13640.14		13640.15		13640.16		13640.17		13640.18	
Parameters	Units												
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DIMETHYLPHENOL	ug/l	4.00	J	10	U	10	U	10	U	10	U	10	U
2,4-DINITROPHENOL	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PENTACHLOROPHENOL	ug/l	14		10	U	10	U	10	U	10	U	10	U
PHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	62		10	U	10	U	10	U	10	U	10	U
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
FLUORANTHENE	ug/l	11		10	U	10	U	10	U	10	U	10	U
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
NAPHTHALENE	ug/l	8600	D	10	U	10	U	10	U	10	U	10	U
PHENANTHRENE	ug/l	150		10	U	10	U	10	U	2.00	J	10	U
BENZO(A)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
CARBAZOLE	ug/l	180	JD	10	U	10	U	10	U	10	U	10	U
BENZO(A)PYRENE	ug/l	-		-		-		-		-		-	
BTEX													
BENZENE	ug/l	100	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
XYLENE (TOTAL)	ug/l	75.4	J	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
POLYNUCLEAR AROMATIC HYDROCARBONS													
NAPHTHALENE	ug/l	-		-		-		-		-		-	

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
* See enclosure for additional qualifiers

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 05/28/93
PAGE: 6

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL93

Sample Point-> / Sample Date-> / SWLO#->	Units	GWMCMW8 05/05/93 13640.13	GWMCME5 05/06/93 13640.14	GWMCMW16 05/06/93 13640.15	GWMCMW14 05/05/93 13640.16	GWMCME6 05/05/93 13640.17	GWMCMW1AR 05/05/93 13640.18
Parameters							
ACENAPHTHYLENE	ug/l	-	-	-	-	-	-
ACENAPHTHENE	ug/l	-	-	-	-	-	-
MISC PARAMETER							
PHENOLS	mg/l	-	-	-	-	-	-
FIELD CONDUCTIVITY	um/cm	275	254	228	361	254	220
FIELD CONDUCTIVITY	um/cm	276	253	226	372	251	210
FIELD CONDUCTIVITY	um/cm	273	261	234	366	275	216
FIELD CONDUCTIVITY	um/cm	288	265	255	374	269	245
FIELD PH	s.u.	5.77	8.31	5.44	6.21	7.82	4.75
FIELD PH	s.u.	5.80	8.34	5.41	6.25	7.89	4.78
FIELD PH	s.u.	5.75	8.36	5.43	6.28	7.80	4.79
FIELD PH	s.u.	5.76	8.36	5.42	6.29	7.82	4.78
FLOATERS	ft	0.00	0.00	0.00	0.00	0.00	0.00
SINKERS	ft	0.00	0.00	0.00	0.00	0.00	0.00

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 05/28/93

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL93

Sample Point->		GWMCMW4	GWMCMW11		GWMREP				
Sample Date->		05/05/93	05/05/93		05/05/93				
SWLO#->		13640.19	13640.20		13640.21				
Parameters	Units								
ACID EXTRACTABLES									
2-CHLOROPHENOL	ug/l	-	-		10	U			
2,4-DIMETHYLPHENOL	ug/l	-	-		5.00	J			
2,4-DINITROPHENOL	ug/l	-	-		50	U			
P-CHLORO-M-CRESOL	ug/l	-	-		10	U			
PENTACHLOROPHENOL	ug/l	-	-		7.00	J			
PHENOL	ug/l	-	-		10	U			
2,4,6-TRICHLOROPHENOL	ug/l	-	-		10	U			
2,3,4,6-TETRACHLOROPHENOL	ug/l	-	-		10	U			
BASE/NEUTRAL EXTRACTABLES									
ACENAPHTHYLENE	ug/l	-	-		46				
BENZO(A)ANTHRACENE	ug/l	-	-		10	U			
BENZO(B)FLUORANTHENE	ug/l	-	-		10	U			
BENZO(K)FLUORANTHENE	ug/l	-	-		10	U			
DIBENZ(A,H)ANTHRACENE	ug/l	-	-		10	U			
FLUORANTHENE	ug/l	-	-		7.00	J			
INDENO(1,2,3-CD)PYRENE	ug/l	-	-		10	U			
NAPHTHALENE	ug/l	-	-		5800	D			
PHENANTHRENE	ug/l	-	-		110				
BENZO(A)PYRENE	ug/l	-	-		10	U			
CARBAZOLE	ug/l	-	-		500	ED			
BENZO(A)PYRENE	ug/l	-	-		-				
BTEX									
BENZENE	ug/l	-	-		100	U			
XYLENE (TOTAL)	ug/l	-	-		57.3	J			
POLYNUCLEAR AROMATIC HYDROCARBONS									
NAPHTHALENE	ug/l	2790	25	U	-				

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 05/28/93
PAGE: 8

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point->		GWMCMW4		GWMCMW11		GWMREP			
Sample Date->		05/05/93		05/05/93		05/05/93			
SWLO#->		13640.19		13640.20		13640.21			
Parameters	Units								
ACENAPHTHYLENE	ug/l	25	U	25	U	-			
ACENAPHTHENE	ug/l	25	U	25	U	-			
MISC PARAMETER									
PHENOLS	mg/l	0.36		0.010	U	-			
FIELD CONDUCTIVITY	um/cm	202		99		-			
FIELD CONDUCTIVITY	um/cm	208		101		-			
FIELD CONDUCTIVITY	um/cm	226		102		-			
FIELD CONDUCTIVITY	um/cm	230		111		-			
FIELD PH	s.u.	5.15		5.45		-			
FIELD PH	s.u.	5.11		5.45		-			
FIELD PH	s.u.	5.20		5.42		-			
FIELD PH	s.u.	5.17		5.49		-			
FLOATERS	ft	0.00		0.00		-			
SINKERS	ft	0.00		0.00		-			

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE
* See enclosure for additional qualifiers

KERR-McGEE CHEMICAL CORPORATION
P.O. BOX 906 • COLUMBUS, MISSISSIPPI 39703-0906

June 17, 1993

Mr. Bruce Ferguson
Mississippi Department of Environmental Quality
Hazardous Waste Division
P. O. Box 10385
Jackson, MS 39289-0385

Re: Compliance Evaluation Inspection
May 5, 1993

Dear Mr. Ferguson:

Regarding the conditions noted in your letter to us dated June 11, 1993, that are in need of attention, we are taking the following steps to correct:

1. Sampling of our monitoring wells is scheduled to be conducted in August. The technician performing the sampling will inspect and replace all teflon coated wires at that time.

2. A drilling crew, along with Kerr-McGee staff hydrologist is scheduled to be at our plant during July. At that time CMW19 will be repaired and a flush mount casing will be installed, if possible. If CMW19 cannot be repaired, the well will be abandoned per all applicable federal and state regulations.

3. The eroded portion of the closed surface impoundment has been repaired. We will closely monitor these repairs, for effectiveness and quickly correct any deficiencies.

If the corrective action we have outlined above is not adequate, please advise.

Sincerely,

KERR-MCGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

John J. Getz
Plant Manager

JJG/tjj

cc: N. E. Bock
A. N. Helms
C. J. Swann

FOREST PRODUCTS

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

FILE COPY

June 11, 1993

Mr. John Getz
Kerr-McGee Chemical Corporation
P.O. Box 906
Columbus, Mississippi 39701

Re: Compliance Evaluation Inspection
May 5, 1993
Columbus, Mississippi

Dear Mr. Getz:

Please find enclosed a copy of the report for the above referenced inspection. No violations were found during the inspection, however, the following conditions are noted as requiring attention:

1. The teflon coated wire used to lower the bailers into the wells appeared worn and may need changing in some wells.

2. Monitoring well CMU-19 appeared to have been rotated. The integrity of this well's casing should be checked.

3. Erosion is starting to occur in the southern portion of the closed surface impoundment.

Please respond when these matters have been resolved or within 10 days of receiving this letter respond with why you do not think any action should be taken.

Should you have any questions, please contact me at 961-5141.

Sincerely,

Bruce Ferguson
Hazardous Waste Division

BF:gd

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

April, 28, 1993

Mr. Bruce Ferguson
RCRA TSD Coordination
Mississippi Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39789-0385

Re: Kerr-McGee Chemical Corporation Forest Product Division
Columbus, Mississippi
Bimonthly Progress Report - Consent Order 1636-89
May 1, 1993

Dear Mr. Ferguson:

The following bimonthly progress report is submitted in compliance with the August 21, 1989 agreed consent order between Kerr-McGee Chemical Corporation, Forest Product Division (KMCC-FPD) and the Mississippi Commission on Environmental Quality.

Groundwater collection trenches in the cemetery and the solid waste management unit are fully operational. In addition, the three recovery wells (RW 10, RW11, and RW12) installed in December of 1992 are functional for weekly product removal.

The 1993 first quarter corrective action groundwater monitoring results have been enclosed for your review. These results include the analyses for monitor wells CMW-64 and CMW-65 (installed 12/92). Both wells are below detection for the analyzed constituents. Naphthalene was estimated at a concentration detected below limit of quantiation (J value) in CMW-65.

The second quarter groundwater sampling has been scheduled for the first week in May, in accordance with the approved analytical schedule.

KMCC revised the financial assurance for post-closure care and corrective action on March 30, 1993 and submitted the estimates using the CPI.

If you have any questions regarding the bimonthly report or the facility's waste management program, please contact me at (405) 270-2394.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

NICK BOCK
Staff Environmental Specialist

NB/JP/dw

cc: J. J. Getz
J. M. Poor
J. H. Bull

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 03/08/93
PAGE: 3

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point->		GWMCMW64		GWMCMW58		GWMCMW65		GWMCMW26		GWMCMW60		GWMCMW61	
Sample Date->		02/03/93		02/03/93		02/03/93		02/03/93		02/03/93		02/03/93	
SWLO#->		12521.07		12521.08		12521.09		12521.10		12521.11		12521.12	
Parameters	Units												
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DIMETHYLPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DINITROPHENOL	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PENTACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	10	U	10	U	10	U	10	U	10	U	3.00	J
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	18	
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
NAPHTHALENE	ug/l	10	U	2.00	J	4.00	J	10	U	10	U	10	U
PHENANTHRENE	ug/l	10	U	10	U	10	U	10	U	10	U	8.00	J
BENZO(A)PYRENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
CARBAZOLE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
BTEX													
BENZENE	ug/l	-		-		-		-		-		-	
XYLENE (TOTAL)	ug/l	-		-		-		-		-		-	
MISC PARAMETER													
FIELD CONDUCTIVITY	um/cm	710		165		218		182		386		-	
FIELD CONDUCTIVITY	um/cm	708		165		217		182		387		-	
FIELD CONDUCTIVITY	um/cm	707		171		215		176		384		-	
FIELD CONDUCTIVITY	um/cm	709		172		221		170		390		-	

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
T: TRACE

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 03/08/93
PAGE: 1

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point->		GWMCMW6		GWMCMW7		GWMCMW8		GWMCMW62		GWMCMW63		GWMCMWREP	
Sample Date->		02/03/93		02/03/93		02/03/93		02/03/93		02/03/93		02/03/93	
SWLO#->		12521.01		12521.02		12521.03		12521.04		12521.05		12521.06	
Parameters	Units												
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
2,4-DIMETHYLPHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
2,4-DINITROPHENOL	ug/l	50	U	50	U	2500	U	50	U	50	U	2500	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
PENTACHLOROPHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
PHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	10	U	10	U	500	U	10	U	10	U	59	J
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
FLUORANTHENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
NAPHTHALENE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
PHENANTHRENE	ug/l	10	U	10	U	3700		10	U	5.00	J	6100	
BENZO(A)PYRENE	ug/l	10	U	10	U	110	J	10	U	10	U	210	J
CARBAZOLE	ug/l	10	U	10	U	500	U	10	U	10	U	500	U
						96	J	10	U	10	U	270	J
BTEX													
BENZENE	ug/l	1.00	U	1.00	U	100	U	-		-		-	
XYLENE (TOTAL)	ug/l	1.00	U	1.00	U	112		-		-		-	
MISC PARAMETER													
FIELD CONDUCTIVITY	um/cm	5.97		398		325		309		187		490	
FIELD CONDUCTIVITY	um/cm	5.96		395		335		309		203		465	
FIELD CONDUCTIVITY	um/cm	5.94		395		333		310		205		494	
FIELD CONDUCTIVITY	um/cm	5.96		399		337		312		212		490	

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T: TRACE

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point->		GWMCMW6	GWMCMW7	GWMCMW8	GWMCMW62	GWMCMW63	GWMCMWREP
Sample Date->		02/03/93	02/03/93	02/03/93	02/03/93	02/03/93	02/03/93
SWLO#->		12521.01	12521.02	12521.03	12521.04	12521.05	12521.06
Parameters	Units						
FIELD PH	s.u.	446	6.10	5.74	6.24	5.47	5.27
FIELD PH	s.u.	400	6.08	5.71	6.21	5.54	5.26
FIELD PH	s.u.	414	6.10	5.72	6.23	5.54	5.29
FIELD PH	s.u.	415	6.13	5.75	6.25	5.53	5.28
FLOATERS	in	0.00	0.00	0.00	0.00	0.00	0.00
SINKERS	in	0.00	0.00	0.00	0.00	0.00	0.00

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
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* See enclosure for additional qualifiers

* See enclosure for additional qualifiers

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 03/08/93
PAGE: 4

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL93

Sample Point-> / Sample Date-> / SWLO#->	Units	GWMCMW64 02/03/93 12521.07	GWMCMW58 02/03/93 12521.08	GWMCMW65 02/03/93 12521.09	GWMCMW26 02/03/93 12521.10	GWMCMW60 02/03/93 12521.11	GWMCMW61 02/03/93 12521.12
Parameters							
FIELD PH	s.u.	6.24	5.81	5.29	6.20	6.54	-
FIELD PH	s.u.	6.23	5.79	5.29	6.16	6.50	-
FIELD PH	s.u.	6.28	5.87	5.25	6.17	6.50	-
FIELD PH	s.u.	6.34	5.84	5.23	6.15	6.50	-
FLOATERS	in	0.00	0.00	0.00	0.00	0.00	-
SINKERS	in	0.00	0.00	0.00	0.00	0.00	-

U: ANALYZED BUT NOT DETECTED
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
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KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

April 2, 1993

CERTIFIED MAIL - RETURN RECEIPT

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

Re: Updated Sampling and Analysis Plan
Kerr-McGee Chemical Corporation
Meridian, Mississippi Facility

Dear Mr. Ferguson,

Enclosed for your review is an updated Sampling and Analysis Plan (SAP) for the Kerr-McGee Chemical Corporation (KMCC), Meridian, Mississippi facility. The revision was prompted by your comments and recommendations contained in your December 11, 1992 Operation & Maintenance Inspection report sent to Nick Bock.

In addition to addressing those items that you requested, please be advised that this new SAP contains the latest QA Manual and standard operating procedures from our contract laboratory (Southwest Laboratory of Oklahoma).

Please do not hesitate to contact me at (405) 270-3747 if you have any questions.

Sincerely,

A. Keith Watson
Manager, Regulatory Compliance

cc: B. Harmon - KMCC (Meridian)
R. Widmann

Kerr McGee Lowndes Co. RCRA- Comp.

KERR-MCGEE CHEMICAL CORPORATION
KERR-MCGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

September 29, 1998

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

Re: Kerr-McGee Chemical LLC -Forest Products Division
Columbus Mississippi Facility
1998 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 *1998 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 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

STEPHEN A. LADNER
Staff Environmental Specialist

SL/TWR

Enclosures

cc: R. Murphey
T. Reed

FOREST PRODUCTS

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

February 28, 1993

Bruce Ferguson
RCRA TSD Coordination
Mississippi Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39289-0385

Re: Kerr-McGee Chemical Corporation
Forest Products Division
Columbus, Mississippi Facility
Bimonthly Progress Report -
Consent Order 1636-89
March 1, 1993

Dear Mr. Ferguson:

The following bimonthly progress report is submitted in compliance with the August 21, 1989 agreed consent order between Kerr-McGee Chemical Corporation, Forest Products Division (KMCC-FPD) and the Mississippi Commission on Environmental Quality.

Groundwater trenches in the cemetery and solid waste management unit have been started up. Both trenches are fully operational.

A meeting was held in Columbus, MS at the Columbus Plant at 9:00 A.M. on January 19, 1993 with Department of Environmental Quality. The purpose of this meeting was to review historical and present environmental conditions at the facility and to discuss the impact of the new wood treating regulations on the industry.

The semi-annual report was submitted on March 1, 1993 and detailed the annual performance of the groundwater monitoring and recovery systems.

If you have any questions regarding the bimonthly report or the facility's waste management program, please contact me at (405) 270-2394.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Nick Bock
Staff Environmental Specialist

NB/JP:wpc

cc: J. Getz
R. Jones
J. Poor

FOREST PRODUCTS

5208C

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

February 3, 1993

Mr. Bruce Ferguson
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39789-0385

Re: Kerr-McGee Chemical Corporation Forest Product Division
Columbus, Mississippi
Report of possible monitor well impact

Dear Mr. Ferguson:

As per our December 18, 1992 telephone conversation, I have reviewed facility data to inform you of possible cross-contamination to the upgradient alluvial monitor well, CMW16 and to Eutaw monitor well CME3. A third well (P8) located in this area is a Eutaw formation piezometer which was constructed to measure the effects of a pump test on the Eutaw formation.

Facility personnel perform a monitoring program to ensure that the groundwater recovery program is operating effectively. Water levels from predetermined monitoring wells and piezometers are recorded weekly to confirm that a zone of capture is preventing migration of impacted groundwater off-site of the facility property. A clean water level indicator is used for measuring water levels in wells which contain dissolved constituents, and a dirty water level indicator for measuring water levels in those wells which contain free phase product. The indicators are decontaminated after each use, however the creosote tend to stain the line after extended use. The data is recorded weekly on a form.

Analytical data for upgradient monitor well CMW16 (alluvial) and CME3 (Eutaw formation) was received for the second quarter of 1992 sampled 5/5/92. Both wells contained "J Flags" (estimated values - the concentration was below the limit of quantification) for naphthalene. This was the first analyses on these wells which was not non-detectable. A review of the facility records indicates that water levels in piezometer P8 were being measured rather than those in recovery well RW8. Piezometer P8 was measured with a dirty water level indicator which may have been responsible for the "J flag" observed in CME3 and CMW16.

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Additional casing volumes were removed from CME3, P8 and CMW16 prior to collecting groundwater samples for the 1992 4th quarter sampling event. The analytical data was below the detection limit for all constituents analyzed in MW16 and CME3. These wells will be closely observed for the next year.

A new clean water level indicator was purchased by the facility to measure those designated wells which contain dissolved constituents. The previously designated "clean" water level indicator is now used to measure the dirty wells which contain free product. A color coding program was put into effect at the facility to insure that potential cross-contamination will not occur. Caps of monitor wells were painted as followed:

RED - No admittance for facility personnel (these are analytically clean wells, and wells used for routine monitoring)

GREEN with "C" - facility may measure water levels using a clean water level indicator (wells with dissolved constituents)

GREEN with "D" - facility may measure water levels using a dirty water level indicator (wells with free product)

If you have any questions or if I may be of further assistance, please contact me at (405) 270-2394, or Jami Poor at (405) 270-2675.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Nick Bock

NICK BOCK
Staff Environmental Specialist

NB/JP/dw

cc: J. J. Getz
J. M. Poor
J. H. Bull

KERR-McGEE CHEMICAL CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

December 31, 1992

Bruce Ferguson
RCRA TSD Coordination
Mississippi Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39289-0385

Re: Kerr-McGee Chemical Corporation
Forest Products Division
Columbus, Mississippi Facility
Bimonthly Progress Report -
Consent Order 1636-89
January 1, 1993

Dear Mr. Ferguson:

The following bimonthly progress report is submitted in compliance with the August 21, 1989 agreed consent order between Kerr-McGee Chemical Corporation, Forest Products Division (KMCC-FPD) and the Mississippi Commission on Environmental Quality.

KMCC completed the installation of two groundwater recovery trenches during the reporting period. These trenches have been started up and are undergoing minor maintenance problems. KMCC anticipates both trenches will be fully operational during the month of January 1993.

During December KMCC installed 4 six-inch alluvial groundwater recovery wells. Two were installed on the eastern property boundary and two were installed within the SWMU. In addition, boundary control wells were installed between CMW-54/CMW-68 and CMW-63/CMW-58 fulfill the requirements of your July 10, 1992 approval letter. An additional 8 alluvial piezometers were installed to access the performance of the containment trenches.

A meeting has been scheduled in Columbus, MS at the Columbus Plant at 9:00 A.M. on January 19, 1993 with Department of Environmental Quality Commissioner's and Department representatives. The purpose of this meeting is to review historical and present environmental conditions at the facility and to discuss the impact of the new wood treating regulations on the industry.

Fourth quarter corrective action groundwater monitoring was completed during the week of November 13, 1992, in accordance with the approved analytical schedule. These data are enclosed for your review.

The recovery system continues to perform well. The semi-annual report will be submitted on March 1, 1993 and will detail the annual performance of the groundwater monitoring and recovery systems.

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If you have any questions regarding the bimonthly report or the facility's waste management program, please contact me at (405) 270-2394.

Sincerely,

KERR-McGEE CHEMICAL CORPORATION
FOREST PRODUCTS DIVISION

Nick Bock
Staff Environmental Specialist

NB/JP:wpc

cc: J. Getz
R. Jones
J. Poor
J. Crawford, Esq.

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 12/07/92
PAGE: 1

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL

Sample Point-> / Sample Date-> / SWLO#->	Units	GWMCMW4 11/14/92 11735.07		GWMMW1AR 11/14/92 11735.08		GWMCMW9 11/14/92 11735.09		GWMCMW10 11/14/92 11735.10		GWMREP 11/14/92 11735.11		
Parameters												
ACID EXTRACTABLES												
2-CHLOROPHENOL	ug/l	500	U	10	U	-		-		10	U	
2,4-DIMETHYLPHENOL	ug/l	500	U	10	U	-		-		10	U	
2,4-DINITROPHENOL	ug/l	2500	U	50	U	-		-		50	U	
P-CHLORO-M-CRESOL	ug/l	500	U	10	U	-		-		10	U	
PENTACHLOROPHENOL	ug/l	500	U	10	U	-		-		10	U	
PHENOL	ug/l	500	U	10	U	-		-		10	U	
2,4,6-TRICHLOROPHENOL	ug/l	500	U	10	U	-		-		10	U	
2,3,4,6-TETRACHLOROPHENOL	ug/l	500	U	10	U	-		-		10	U	
BASE/NEUTRAL EXTRACTABLES												
ACENAPHTHYLENE	ug/l	88	J	10	U	-		-		1.00	J	
BENZO(A)ANTHRACENE	ug/l	500	U	10	U	-		-		9.00	J	
BENZO(B)FLUORANTHENE	ug/l	500	U	10	U	-		-		4.00	J	
BENZO(K)FLUORANTHENE	ug/l	500	U	10	U	-		-		10	U	
DIBENZ(A,H)ANTHRACENE	ug/l	500	U	10	U	-		-		10	U	
FLUORANTHENE	ug/l	500	U	10	U	-		-		40		
INDENO(1,2,3-CD)PYRENE	ug/l	500	U	10	U	-		-		2.00	J	
NAPHTHALENE	ug/l	3300		10	U	-		-		67		
PHENANTHRENE	ug/l	310	J	10	U	-		-		53		
BENZO(A)PYRENE	ug/l	500	U	10	U	-		-		4.00	J	
CARBAZOLE	ug/l	290	J	10	U	-		-		12		
BTEX												
BENZENE	ug/l	100	U	1.00	U	0.80	J	-		-		
XYLENE (TOTAL)	ug/l	100	U	1.00	U	1.10		-		-		
MISC PARAMETER												
FIELD CONDUCTIVITY	um/cm	270		220		-		-		-		
FIELD CONDUCTIVITY	um/cm	270		243		-		-		-		
FIELD CONDUCTIVITY	um/cm	273		240		-		-		-		
FIELD CONDUCTIVITY	um/cm	277		240		-		-		-		

U: ANALYZED BUT NOT DETECTED
B: ANALYTE DETECTED IN BLANK AS WELL AS SAMPLE
J: ESTIMATED VALUE: CONCENTRATION BELOW LIMIT OF QUANTITATION
T: TRACE
* See enclosure for additional qualifiers

Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 12/07/92
PAGE: 2

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL

Sample Point-> / Sample Date-> / SWL0#->	Units	GWMCMW4 11/14/92 11735.07	GWMMW1AR 11/14/92 11735.08	GWMCNW9 11/14/92 11735.09	GWMCNW10 11/14/92 11735.10	GWMREP 11/14/92 11735.11	
Parameters							
FIELD pH	s.u.	5.74	5.38	-	-	-	
FIELD pH	s.u.	5.67	5.34	-	-	-	
FIELD pH	s.u.	5.66	5.45	-	-	-	
FIELD pH	s.u.	5.65	5.36	-	-	-	
FLOATERS	in	0.00	0.00	0.00	0.00	-	
SINKERS	in	0.00	0.00	0.00 T	0.84	-	

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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 12/07/92
PAGE: 1

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL

Sample Point-> / Sample Date-> / SWL0#->		GWMCME3 11/12/92 11706.01		GWMCMW16 11/12/92 11706.02		GWMCME5 11/12/92 11706.03		GWMCME6 11/12/92 11706.04		GWMCMW11 11/12/92 11706.05		GWMCME4 11/12/92 11706.06	
Parameters	**Units**												
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,4-DIMETHYLPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	2.00	J
2,4-DINITROPHENOL	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
PENTACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	4.00	J	5.00	J
PHENOL	ug/l	10	U	10	U	18		2.00	J	10	U	10	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	10	U	12	
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	10	U	10	U	10	U	10	U	3.00	J	9.00	J
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	15		10	U
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	26		10	U
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	3.00	J	10	U
FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	42		2.00	J
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	10	U	10	U	12		10	U
NAPHTHALENE	ug/l	10	U	10	U	10	U	10	U	14		10	U
PHENANTHRENE	ug/l	10	U	10	U	10	U	10	U	6.00	J	19	
BENZO(A)PYRENE	ug/l	10	U	10	U	10	U	10	U	19		10	U
CARBAZOLE	ug/l	10	U	10	U	10	U	10	U	5.00	J	59	
BTEX													
BENZENE	ug/l	1.00	U	1.00	U	1.00	U	1.00	U	1.30		100	U
XYLENE (TOTAL)	ug/l	1.00	U	1.00	U	0.70	J	1.00	U	1.00	U	100	U
MISC PARAMETER													
FIELD CONDUCTIVITY	um/cm	468		264		271		277		160		269	
FIELD CONDUCTIVITY	um/cm	478		263		267		276		151		270	
FIELD CONDUCTIVITY	um/cm	476		262		270		278		149		262	
FIELD CONDUCTIVITY	um/cm	481		264		277		288		154		277	

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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 12/07/92
PAGE: 2

Client: KERR MCGEE CHEMICAL CORPORATION

Project: KMCCFPDCOL

Sample Point-> / Sample Date-> / SWLO#->		GWMCME3 11/12/92 11706.01	GWMCMW16 11/12/92 11706.02	GWMCME5 11/12/92 11706.03	GWMCME6 11/12/92 11706.04	GWMCMW11 11/12/92 11706.05	GWMCME4 11/12/92 11706.06
Parameters	Units						
FIELD pH	s.u.	7.11	5.17	8.82	7.97	5.86	7.69
FIELD pH	s.u.	7.15	5.12	8.86	7.92	5.89	7.74
FIELD pH	s.u.	7.12	5.11	8.82	7.94	5.83	7.75
FIELD pH	s.u.	7.16	5.15	8.83	7.95	5.88	7.70
FLOATERS	in	0.00	0.00	0.00	0.00	0.00	0.00
SINKERS	in	0.00	0.00	0.00	0.00	0.00	0.00

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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

DATE: 12/07/92
PAGE: 1

Client: KERR MCGEE CHEMICAL CORPORATION Project: KMCCFPDCOL

Parameters	Units	Sample Point-> GWMCMW22 Sample Date-> 11/14/92 SWL0#-> 11735.01		Sample Point-> GWMCMW14 Sample Date-> 11/14/92 SWL0#-> 11735.02		Sample Point-> GWMCMW6 Sample Date-> 11/14/92 SWL0#-> 11735.03		Sample Point-> GWMCMW7 Sample Date-> 11/14/92 SWL0#-> 11735.04		Sample Point-> GWMCMW8 Sample Date-> 11/14/92 SWL0#-> 11735.05		Sample Point-> GWMCMW3 Sample Date-> 11/14/92 SWL0#-> 11735.06	
ACID EXTRACTABLES													
2-CHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
2,4-DIMETHYLPHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
2,4-DINITROPHENOL	ug/l	50	U	50	U	50	U	50	U	5000	U	50	U
P-CHLORO-M-CRESOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
PENTACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
PHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
2,4,6-TRICHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
2,3,4,6-TETRACHLOROPHENOL	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
BASE/NEUTRAL EXTRACTABLES													
ACENAPHTHYLENE	ug/l	10	U	10	U	10	U	10	U	250	J	2.00	J
BENZO(A)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	1000	U	10	
BENZO(B)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	1000	U	4.00	J
BENZO(K)FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
DIBENZ(A,H)ANTHRACENE	ug/l	10	U	10	U	10	U	10	U	1000	U	10	U
FLUORANTHENE	ug/l	10	U	10	U	10	U	10	U	1000	U	46	
INDENO(1,2,3-CD)PYRENE	ug/l	10	U	10	U	10	U	10	U	1000	U	1.00	J
NAPHTHALENE	ug/l	10	U	10	U	10	U	10	U	6200		63	
PHENANTHRENE	ug/l	10	U	10	U	10	U	10	U	230	J	73	
BENZO(A)PYRENE	ug/l	10	U	10	U	10	U	10	U	1000	U	3.00	J
CARBAZOLE	ug/l	10	U	10	U	10	U	10	U	1000	U	14	
BTEX													
BENZENE	ug/l	1.00	U	1.00	U	1.00	U	1.00	U	100	U	0.80	J
XYLENE (TOTAL)	ug/l	2.80		1.00	J	1.00	U	2.30		105		1.00	
MISC PARAMETER													
FIELD CONDUCTIVITY	um/cm	233		377		367		361		311		453	
FIELD CONDUCTIVITY	um/cm	234		384		365		361		300		439	
FIELD CONDUCTIVITY	um/cm	225		384		365		366		308		432	
FIELD CONDUCTIVITY	um/cm	230		396		372		352		304		436	

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Southwest Laboratory of Oklahoma, Inc.
Data Summary Report
By Episode

Client: KERR MCGEE CHEMICAL CORPORATION **Project:** KMCCFPDCOL

Sample Point-> / Sample Date-> / SWL0#->	Parameters	Units	GWMCMW22 11/14/92 11735.01	GWMCMW14 11/14/92 11735.02	GWMCMW6 11/14/92 11735.03	GWMCMW7 11/14/92 11735.04	GWMCMW8 11/14/92 11735.05	GWMCMW3 11/14/92 11735.06
	FIELD pH	s.u.	5.37	6.68	6.31	6.35	5.95	6.52
	FIELD pH	s.u.	5.36	6.62	6.30	6.36	5.92	6.50
	FIELD pH	s.u.	5.84	6.70	6.28	6.40	5.90	6.50
	FIELD pH	s.u.	5.40	6.69	6.33	6.35	5.93	6.60
	FLOATERS	in	0.00	0.00	0.00	0.00	0.00	0.00
	SINKERS	in	0.00	0.00	0.00	0.00	0.00	0.00

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