

May 9, 1991

Certified - Return Receipt

Mr. Damon Wingfield Waste Management Service Oklahoma State Department of Health P. O. Box 53551 Oklahoma City, OK 73125

Re: Cushing Site

Dear Mr. Wingfield:

Pursuant to Section IX.2 of the Consent Order entered in State of Oklahoma v. Kerr-McGee Corporation, No. C-90-91-H, Kerr-McGee Corporation hereby submits the attached written progress report for the month of April 1991.

Please call me at (918) 225-7753 if you have any questions about this report.

Sincerely,

James E. Cleveland Project Coordinator

JEC:11d

Attachment

xc: Bill Fisher - U. S. NRC, Arlington, Texas
William M. Kemp - Radiation Protection Service
Glen Sjoblom - U. S. NRC, Washington, D.C.
Kerr-McGee Citizens' Oversight Committee

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#### CUSHING SITE REMEDIAL ACTION

Pursuant to Section IX.2 of Consent Order No. C-90-91H of the District Court of Payne County, State of Oklahoma, Kerr-McGee Corporation hereby submits the Cushing Remedial Action progress report for the month of April 1991.

# RADIOLOGICAL INVESTIGATION AND REMEDIATION

Site Characterization

The gamma survey and sediment sample collection of Skull Creek is complete. The survey shows uranium and thorium concentration in the creek bank soils and the bottom sediments above the NRC release criteria in several locations. A possible realignment of Skull Creek from pit 5 to the Southeast property line is being studied. This plan (if pursued) will allow the cleanup of materials as required by the consent order.

The Nuclear Regulatory Commissions contractor report for their visit in November 1990 has been received and reviewed. Following the recommendation made in the report, a spot survey of several areas on the north side of the refinery area is being completed using more sensitive gamma instrumentation. A 3" 2 x 2 NaI detector coupled to a Ludlum scaler is being used to survey around the berms, Pit 4, and along drainage areas. Areas with above background readings will be flagged for future evaluation.

The Radiological Characterization Report required by the Consent Order was completed and delivered to the OSDH on May 6, 1991. Because of a computer breakdown, some trench and soil sampling data was not available. Analysis of these samples will be completed in May 1991 and new tables will amend this report.

#### Processing Site

Work continued on the cleanup of the process building during April. Shot blasting of the walls and floors has been completed. A few small spot areas along floor seams where contamination exists above the NRC limits are being removed with shot blasting and chippers.

Approximately 50 percent of the concrete floor slab has been removed under the thorium process area. Some drain lines and concrete will be removed in May. Bricks that were sorted out from contaminated soils have been stockpiled in this area. These bricks are being cleaned, using a steam cleaner and water hose. The cleaned bricks meet the NRC release criteria and will be buried with normal building rubble.

\* The brick wall in the basement area has been removed. Uranium and thorium contamination is still present behind a concrete wall and is being evaluated for final cleanup.

### REFINERY REMEDIATION

Remediation of the refinery site South of Deep Rock Road has been completed. All sloping is completed and run-off berms for rainfall control have been installed. The site was mulched with hay and seeded with long stemmed prairie bluegrass as recommended by a member of the Oklahoma State University faculty.

Work continues to control the pH of Skull Creek along pit 5. Installation of limestone chat dam-fiters has maintained a pH of 4 to 6. A plan to reroute Skull Creek away from pit 5 to eliminate this seepage is being studied.

The final response to the OSDH comments on the Remedial Investigation and Feasibility Study was submitted on April 12, 1991. A work plan has been prepared and site investigation will proceed to finalize pit cleanup and ground water characterization.

## FUTURE ACTIVITIES

- The next meeting of the Citizen's Oversite Committee will be 1. at the site on May 31, 1991 at 5:00 p.m.
- Work will continue on the process building cleanup. 2.
- Work will continue on the North side of Deep Rock Road 3. refinery site cleanup.
- Work plans will begin to be developed for the cleanup of the acid pits and radioactive contamination on site.

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Kerr-McGee Corporation