



KERR-McGEE CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

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PDR
Haughey
Baugout

ENVIRONMENTAL AND HEALTH MANAGEMENT DIVISION

January 8, 1991

Certified - Return Receipt

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

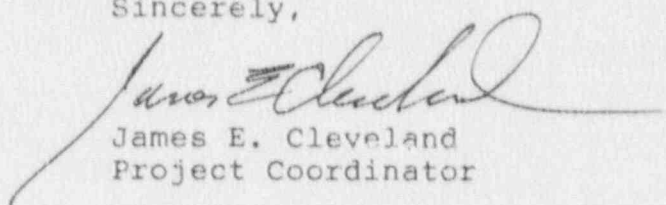
Re: Cushing Site

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 December, 1990.

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

Sincerely,


James E. Cleveland
Project Coordinator

JEC:lld

Attachment

xc: Bill Fisher - U. S. NRC, Arlington, TX
Dale McHard - 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. 90-91-H of the District Court of Payne County, State of Oklahoma, Kerr-McGee hereby submits the Cushing Site Remedial Action progress report for the month of December, 1990.

RADIOLOGICAL INVESTIGATION AND REMEDIATION

Site Characterization

The area south of Skull Creek containing elevated levels of thorium was scanned using a shielded instrument capable of measuring very low levels of gamma radiation. Based on this information, the contaminated soils were removed and stockpiled at the process site for final disposition. A second gamma survey and soil samples taken after the removal of the contaminated materials show gamma radiation and thorium concentrations are at background levels.

Other very small areas where gamma levels were found to be slightly over 15 uR/hr were also investigated. In most cases the levels could not be duplicated. In one area where gamma levels were found to be 15-16 uR/hr, fire brick in the building rubble contained NORM materials which accounted for the slightly elevated radioactive levels.

Processing Site

The concrete floors in the process buildings have been cleaned using a steel shot blasting machine to remove the top layer of the floor. This process removes the fixed radiation contamination and captures the dust generated. The materials containing the contamination are bagged and barreled for shipment to the low level radioactive disposal site. This material will be combined with the contaminated building materials and soils now being shipped. Two truckloads of materials were shipped to the Chem-Nuclear waste site during the month of December.

REFINERY REMEDIATION

Refinery Site Cleanup

The cooling tower storage pond was cleaned out and the sediments were stockpiled on the south side of Pit 5. The water acculation on top of Pit 5 was pumped to the storage pond and will be held in storage until a treatment plant can be installed and an NPDES permit is obtained.

Refinery Site Cleanup - Continued

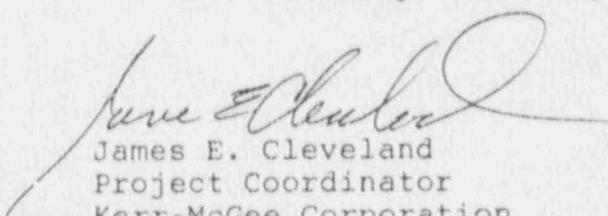
Work continues on the refinery site southeast of Skull Creek. Concrete structures located southwest of the process building were demolished and buried. Steel tank bottoms remaining on site are being removed and salvaged for scrap. Tar materials being removed from the refinery site are being stockpiled on the south side of Pit 5. The proposal for on-site disposal of the asbestos contaminated building materials is being reviewed by the State of Oklahoma. The material is currently isolated and fixed with a latex fixant material.

Refinery Sludges

The phase one work plan for the remedial investigation and the baseline risk assessment were submitted to OSDH on December 4, 1990. As soon as approval is received, the sampling of the non-radioactive portion of the acid sludges will be scheduled.

FUTURE ACTIVITIES

1. Shot blasting of the floors in the process building will continue for the removal of contamination where required.
2. Barreling of contaminated materials and soils will continue.
3. Cleanup of refinery rubble and tank berms will continue.
4. Asbestos contaminated rubble at the refinery site will be cleaned when state approval is received.
5. Sampling of non-radioactive acid sludges will continue when the state approves the plan.
6. The next Citizens' Oversight Committee meeting is scheduled for Saturday, February 9, 1991.



James E. Cleveland
Project Coordinator
Kerr-McGee Corporation