

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

PEOPLE OF THE STATE OF ILLINOIS,

Plaintiff,

v.

No. 80-C2776

KERR-McGEE CORPORATION,

(A Delaware Corporation)

Defendant.

AFFIDAVIT OF WILLIAM A. NIXON

State of Maryland)

County of Montgomery)

ss:

William A. Nixon, being duly sworn, deposes and says:

1. I am employed at the Division of Fuel Cycle and Material Safety, NRC Office of Nuclear Material Safety and Safeguards. The statements made in this affidavit are based upon my knowledge and information available to me in my official capacity.

2. Through my official duties as Project Manager I have become familiar with the conditions at and proposed decommissioning of the Kerr-McGee West Chicago Rare Earths Facility ("Rare Earths Facility") located in West Chicago, Illinois.

3. Kerr-McGee Chemical Corporation ("Kerr-McGee") acquired the Rare Earths Facility in 1967. Kerr-McGee and its predecessor companies operated the Rare Earths Facility from 1932 to 1973 to produce chemical compounds containing thorium, a naturally occurring radioactive element, and rare earth elements.

4. Thorium is a "source material" for the purposes of the Atomic Energy Act of 1954, as amended (Act) 42 U.S.C. 2014z, 10 CFR 40.4(h). Because the facility processed thorium, it was originally licensed by the Atomic Energy Commission in May 1956 and is now licensed by

the Nuclear Regulatory Commission. The material on-site contains tailings from the milling of ore either for its source material content (thorium) or for rare earths recovery. Depending on their thorium content, the tailings are either "byproduct material" or "source material" for the purposes of the Act. Under license No. STA-583, as now effective, Kerr-McGee is authorized to possess and store thorium ores but is not authorized to process thorium.

5. The Rare Earths Facility covers 43 acres divided in three sections: the 8 acre facility site contains processing and other buildings; the 27 acre disposal site contains thorium ore residues and other processing wastes; and the 8 acre linking site connects the other two sites.

6. On October 3, 1975, Kerr-McGee submitted to the NRC a plan for on-site burial of wastes at the Rare Earths Facility. Kerr-McGee withdrew that plan in late 1976 because of concerns expressed by NRC and Illinois state agency representatives.

7. Since late 1976, NRC has been working with Kerr-McGee, Argonne National Laboratory (ANL), and State and local representatives to define the safety and environmental impacts of the site and to determine disposition of the wastes. ANL has submitted reports to the NRC on: analysis of soil and water samples obtained by drilling five holes on the site (July 1977); characteristics of the radioactive and non-radioactive chemical contaminants on the site surface, and assessments of the potential radiological and non-radiological impacts that could be expected from disposal by either on-site burial or by off-site transportation to a licensed burial ground (June 1978).

8. In July 1977, Kerr-McGee agreed to develop a decommissioning plan for the Rare Earths Facility. An amendment to the existing NRC license is required for decommissioning the Rare Earths Facility and stabilizing the thorium wastes at the site.

9. On December 31, 1978, in response to an NRC Order of November 16, 1978, Kerr-McGee submitted a decommissioning plan to the NRC. After receiving public comments on the plan, the NRC on April 10, 1979, requested Kerr-McGee to submit a revised plan including sufficient details to permit NRC to prepare an environmental impact statement.

10. On August 15, 1979, Kerr-McGee submitted a revised plan for decommissioning the facility site and stabilizing the disposal site. Kerr-McGee's preferred plan proposes to demolish and remove all buildings from the factory site and encapsulate the disposal site with clay covered by a layer of topsoil. Kerr-McGee distributed the plan for public comment, discussed it with the West Chicago City Council on August 6, 1979, and held a public meeting on the plan at West Chicago High School on August 8, 1979. The revised plan was reviewed by Federal, state and local officials and additional questions and comments were submitted to Kerr-McGee in November 1979. Kerr-McGee responded to the questions and comments by letter dated April 29, 1980, and the review of their submittal is continuing. Additional information is to be received from Kerr-McGee on alternate sites for waste stabilization and disposal.

11. On December 6, 1979, the NRC issued Notice of Availability of Stabilization Plan and Intent to Prepare a Draft Environmental

Impact Statement Concerning approval of a plan to Decommission the Rare Earths Facility Located at West Chicago, Illinois. 44 Fed. Reg. 72246 (December 13, 1979). The draft environmental impact statement will analyze Kerr-McGee's preferred plan to decommission its Rare Earths Facility and alternatives to the preferred plan. The NRC has determined that authorizing decommissioning activities will result in actions which significantly affect the quality of the human environment. NRC is now preparing the draft environmental impact statement.

12. As a separate matter, on July 31, 1979, Kerr-McGee submitted a Radiological Health Safety Plan to the Region III office of the NRC Office of Inspection and Enforcement. That plan, among other things, proposed decontamination of the on-site buildings by removing their radioactive contamination. The plan was submitted in accordance with a July 1976 agreement with the Region III office that no decontamination would be performed prior to approval of the plan by the regional office. The approved plan permits decontamination activities that are common to any decommissioning plan that may be approved and, therefore, does not preclude any particular future action.

William A. Nixon

WILLIAM A. NIXON

State of Maryland) ss:
County of Montgomery)

Subscribed and sworn to before me
this 9th day of June, 1980.

Virginia H. Hodge
NOTARY PUBLIC

My Commission Expires July 1, 1982