

August 31, 1981

MEMORANDUM FOR: Harold Thornburg, Director, Division of Safeguards
and Radiological Safety Inspection

FROM: J. A. Hind, Director, Division of Emergency
Preparedness and Operational Support

SUBJECT: SURVEYS OF RESIDENTIAL SECTIONS AROUND KERR MC GEE,
WEST CHICAGO, ILLINOIS (AITS F03039881)

Enclosed is a survey report of data collected at the Kerr McGee factory perimeter and in residential sections of West Chicago around the factory. Readings were taken at the curbside; meters were held over the ground of private property as opposed to over the pavement. Both the tailings piles and offsite deposits appear to contribute to the offsite dose; we were not able to accurately estimate the dose fraction from each potential source. No levels in excess of the Part 20 limits of 2 mrem/hr or 100 mrem/7 consecutive days were observed. Average levels and doses to the residents were estimated from these curbside readings, with considerations given to shielding from houses and building materials. Based on occupancy and shielding factors, it appears that the dose to residents in this area of West Chicago probably does not exceed 500 mrem/year, the limit recommended by the National Council on Radiation Protection and Measurements.

We have sent these data to the State of Illinois, Department of Nuclear Safety, who plans on moving some of the offsite material later this year and to the Environmental Protection Agency, Region V. In a meeting on August 12, 1981, with J. G. Keppler, and other Region III personnel, Mr. Richard Cunningham, Director, Division of Fuel Cycle and Material Safety, suggested that the above two agencies were the appropriate agencies to deal with the areas surveyed in the attached report.

Region III requests that the Division of Safeguards and Radiological Safety review the attached report and identify:

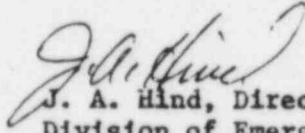
8507090277 850408
PDR FOIA
RAPKIN85-30 PDR

OFFICE	RII <i>EJH</i>	RIII <i>Hind</i>					
SURNAME	Paperiello/ab	Hind					
DATE	9/3/81	8/2/81					140

August 31, 1981

- a) Any other actions with respect to the offsite deposits that Region III needs to take,
- b) Any any other radiological safety level or condition that Region III failed to address.

If you wish additional information on this matter, please call Nora Nicholson or Marty Schumacher of my staff.


J. A. Hind, Director
Division of Emergency Preparedness
and Operational Support

cc w/encl: W. Crow, NMSS

DMB