

PDR



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 25 1980

FCUP:WAN
40-2061

The Honorable A. Eugene Rennels
Mayor of City of West Chicago
475 Main Street
West Chicago, Illinois 60185

Dear Mayor Rennels:

In a letter dated March 5, 1980, it was indicated that NRC would evaluate the potential off-site radiological impact of a fire at the Kerr-McGee site in West Chicago. We have completed our evaluation and have determined that the maximum radiation exposure to persons off site would be a small fraction of the Environmental Protection Agency's Protective Action Guides that are recommended for considering the desirability of evacuating an area. These Protective Action Guides are 1 to 5 rems to the whole body and 5 to 25 rems to the thyroid.

We calculate maximum off-site exposures of 0.001 rem to the whole body and thyroid, 0.010 rem to bone and 0.007 rem to lung to any person off site without any protective action being taken. Based on this analysis, we do not believe evacuation of people from surrounding areas is necessary or appropriate, and do not believe that a protective plan is needed.

Although radiation exposures would be low without any protective actions being taken, it might be advisable to encourage people within 1000 feet of the site to stay indoors in the event of a fire. It would also be prudent to prevent onlookers from gathering near the scene of the fire. These two actions will serve to further limit the exposure of members of the public in case there is a serious fire.

We believe that fire is the only accidental mechanism by which off-site impacts of any magnitude can be generated.

Sincerely,

R. G. Page, Acting Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

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