



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

March 20, 1991

The Honorable Peter H. Kostmayer  
Member, United States House of Representatives  
150 South Main Street  
Doylestown, PA 18901

Dear Congressman Kostmayer:

I am responding to your letter of February 21, 1991, which enclosed a letter from Ms. Lynne P. Balzer. Ms. Balzer: (1) requested information about the nuclear accident that occurred in 1986 at the Kerr-McGee plant in eastern Oklahoma; (2) expressed an understanding that the "...plant manufactures plutonium (a nuclear fuel and the most dangerous substance known to man)"; (3) inquired as to "Exactly what is happening at this plant which could affect (and may have already affected) the surrounding environment..."; and (4) asked about the plant's location.

Concerning Item 1, on January 4, 1986, a cylinder filled with uranium hexafluoride ruptured while being heated at the Sequoyah Fuels Corporation (SFC) facility. The ruptured cylinder released uranium hexafluoride into the atmosphere. One worker died because he inhaled hydrogen fluoride fumes, a reaction product of uranium hexafluoride and airborne moisture. Several other workers were injured by the fumes, but none seriously. Residents downwind of the site were advised to evacuate and report to a local hospital for examination. Approximately 100 people who reported to the hospital were examined and released. To provide more information on the release and the public health impact, I am sending you NUREG-1189, Vol. 1, "Assessment of the Public Health Impact From the Accidental Release of UF<sub>6</sub> at the Sequoyah Fuels Corporation Facility at Gore, Oklahoma" (see enclosure 1).

In response to Item 2, SFC has never possessed or used plutonium at this facility. The facility is operated to produce uranium hexafluoride from uranium ore concentrates and to convert uranium hexafluoride to uranium tetrafluoride. Kerr-McGee, however, did process plutonium at a facility near Crescent, Oklahoma. This facility was shut down in 1975 and now is in the final stages of decontamination and decommissioning.

Regarding Item 3, the environmental effects of the January 4, 1986, incident are also discussed in NUREG-1189. Although my staff considers the rupture of a uranium hexafluoride cylinder to be a worst-case scenario, other accidents were considered during the license renewal process in 1985. I am sending you pages 4-39 to 4-46 from NUREG-1157, "Environmental Assessment for Renewal of Source Material License No. SUB-1010," which describe these accidents and their consequences (see enclosure 2).

More recently, in August 1990, SFC informed the Nuclear Regulatory Commission that uranium was discovered in the soil and water under and around the solvent extraction building. Further investigation by SFC indicated that uranium was also in the soil and water under and around the main process building. SFC has

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installed sumps around these buildings to collect the uranium-contaminated water. SFC is continuing to investigate the extent of water and soil contamination. There is no evidence that the uranium contamination has reached the deeper ground-water-bearing zones under the site or that it has migrated off the SFC property. This SFC investigation is being conducted in accordance with the Facility Environmental Assessment Plan. SFC developed the Plan as a result of enforcement actions my staff took after the SFC discovery of underground uranium contamination. My staff continues to monitor the SFC investigative and remedial actions.

Concerning Item 4, the SFC facility is on Highways 10 and I-40 near Gore, Oklahoma and is close to the Arkansas River which forms the headwaters of the Robert S. Kerr Reservoir (see Figures 2.1.1 and 2.1.1 in NUREG-1189). In 1988, Kerr-McGee sold SFC to a holding company owned by General Atomics.

I trust that this is responsive to your request.

Sincerely,

Original Signed By:  
James M. Taylor

James M. Taylor  
Executive Director  
for Operations

Enclosure:

1. NUREG-1189, Vol. 1
2. NUREG-1157, pp. 4-39 to 4-46

Distribution EDO-6262 w/o encls. w/incoming

Docket 40-8027	PDR	LPDR	NRC File Center	IMUF R/F
IMSB R/F	NMSS R/F	EDO R/F	NMSS Dir. Off R/F	GPA
IMNS Central File	CEstep	CJenkins	Region IV	DMorris, EDO
MVasquez, RIV	RMartin, RIV	JTaylor, EDO	OGC	HThompson, EDO
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GSjoblom			[GB/ED06262]	

\*See previous concurrence

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