40-2061
PDR Return
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June 21, 1982

U.S. Nuclear Regulatory Commission
Attn: Uranium Fuel Licensing Branch
Washington, D. C. 20555

Dear Sirs:

Please find attached my comments on the decommissioning of the of the Kerr-McGee facility in West Chicago, Ill.

Draft Environmental Statement
related to the decommissioning of the
Rare Earths Facility, West Chicago, Illinois
Docket No. 40-2061
Kerr-McGee Chemical Corporation

I appreciate the opportunity to make these observations.

Sincerely,

Donald F Earley

Donald F. Earley

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Comments in regard: Draft Environmental Statement related to the decommissioning of the Rare Earths Facility, West Chicago, Illinois
Docket No. 40-2061
Kerr-McGee Chemical Corporation

Having read the draft of the Environmental Statement, the original final report of Law Engineering Test Co. and Eli Port's reply to the final report, I have come to the following conclusions:

Of all the alternatives, Alternative VI is the most ludicrous. It provides for no solution, no safeguards and it would continue its constant negative impact on the environment of West Chicago.

The other alternatives especially IV and V seen to prolong the problem, since the sites indicated in the draft statement, would not accept the quanitity of material that would be at hand with the decommissioning of the Kerr-McGee facility. Waiting for some area or site that would accept the large mass of contaminated material, would do no more than prolong an intolerable situation.

By eliminating the off site alternatives and the Alternative VI, which is the status quo approach, the alternatives that are still available are Alternatives I,II,III. These three alternatives are quite similar

in most aspects. The NRC has chosen Alternative III, this as the most workable plan in light of the circumstances which presently exist.

With the NRC's recommendation in mind, I would propose the following changes to the Alternative III, Sec. 3-10. The bottom layer of the containment cell is stated to be a minimum of 0.6 m (2 ft.) of natural or compacted clayey materials with hydraulic conductivity of $\cong 10^{-8}$ cm/ sec. (not less than 10^{-7} cm/ sec.). With the bottom layer of the containment cell being the area on which there is the most stress, I will propose the following recommendations:

> The bottom layer of the disposal cell should consist of a minimum of 1.5 m (5 ft.) of a natural or compacted clayey material with hydraulic conductivity of 10^{-8} cm / sec.....

The increase of the thickness of the bottom layer of the disposal cell is proposed for the following reasons: 1. This area is most prone to failure because of chemical activity, any chemical wastes not properly neutralized may cause the bottom layer to fail; 2. The possibility of a void caused by a poor mixture of waste materials may cause pooling of water, which may cause a weakening of the bottom layer; 3. Any sump failure of the leachate collection system.

The upper cap if properly protected from erosion

by sod and other plant materials that would resist and retard erosion, seem to be adquate as designed.

One of the most critical areas of importance is monitoring. This area has two fold implications, first, the psychological and second, the scientific. With all the contradictory rhetoric that has surronded the decommissioning of this facility, the residents of the area are confused as to what is true, what are half-truths and finally which were self-serving political statements. The confidence of the residents would be inhanced if they knew that the decommissioned facility would be constantly monitored. Some type of definitive statement must be made by the NRC as to the monitoring activity that will accompany the decommissioning of the site. The doubt that surrounds this whole issue must be put to rest as soon as possible.

In the area of scientific monitoring, the chemical and radiological are addressed in the draft statement, but I would like to comment on them in light of the psychological implications. The viewers of certain television programs have been unindated with information about chemical wastes and the hazards of chemical wastes. In some cases this information is misleading or uses scare tactics to frighten the general viewer. I believe that the residents of this city do not wish to

be amoung those areas singled out by the electronic and print mediasome years in the future, as a disaster area because of poor planning and especially poor monitoring.

Chemical monitoring should be done on a daily basis for at least the first year, and should be continued on a monthly basis,especially the leachate collection system. The unforeseen accidents or the failure of the clayey bottom layer must be discovered as soon as possible,so as to protect the surrounding environment.

In terms of radiological monitoring, this being a relatively new area in physics, with a number of unproven assumptions being taken as true, special care should be given to monitoring the radioactive isotopes on the site. For most people,this is a mysterious realm of invisible rays that cause illness. We should examine the historical changes that have taken place since the 1940's. This area of study and investigation continues to bring forth new standards of exposure as well as the effects on the human body. As long as these studies continue and as long as there are no definitive standards; we know there is some danger to health, I believe that the monitoring of the radioactive isotopes should be on a daily basis. This monitoring should take place in the surrounding neighborhood as well as in the containment vessel. The

half-life of some of these isotopes is so long that it will be centuries before they are harmless in the uncovered state, therefore in my opinion monitoring should be a constant activity, for the time the material is on the West Chicago site.

Finally, to say that this is a temporary or a five year solution and that another site will be found for this hazardous material, I find suspect. With this in mind, I have commented on this decommissioning plan with the idea that this material will have West Chicago as its depository for more than five years maybe for the foreseeable future. We must be prepared to wait longer than the five years for a new site. In summary, the conclusions that I finally draw are; build it well, be prepared to monitor it for a longer period than five years and have those responsible for our well being and our safety, diligently perform their duty.

I appreciate the opportunity to make this statement. My family and I feel that this is one of the critical issues that we face as citizens of West Chicago.