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OFFICE OF THE CHAIRMAN

Atomic Energy Commission
Washington, D. C.
Attn: Dr. Bruner, Asst. Director

SUBJECT: Leak of waste at Cimmaron Facility
Crescent, Oklahoma

Dear Dr. Bruner:

We thank you for the manner in which you responded to our conversations on this subject. Mr. Donahue of your Chicago office was tactful, competent and effective. Please extend our appreciation to your Messrs. Donahue, Ridgeway and Finn who spent their evening of September 19 answering our questions and trying to allay our concerns. They are fine gentlemen, competent engineers and loyal employees, but they could not allay our many concerns.

Categorically, they conveyed to us a picture of a highly sophisticated operation at Crescent that was well conceived, organized and supervised. We don't doubt the validity of that picture because such would be imperative given the hazardous nature of the materials, the AEC regulations and the corporate liability for occupational hazards. We were reassured to learn, of course, that there had been no major violations of AEC regulations.

As to the relative significance of this leak, we recognize that it is not very high on a ranking scale; however, neither can we dismiss the leak as being of no consequence or without implications for these categorical reasons:

1. The long-term consequences of the cumulative effects of many many small leaks / spills when multiplied by vastly larger and more numerous plants of various designs and objectives operating over several decades.
2. The in-sight provided by examples of routine/common leaks and the extrapolation of the implications and attitudes associated with those to much larger nuclear facilities of various types.
3. A probable error in the assumption that allowable levels of radiation represented by minor leaks are harmless or do not multiply in a food-chain process not yet well understood.
4. It is illuminating to the citizens of Oklahoma in gaining an awareness of the developing nuclear fuel and power industry.

With that categorical statement as background we can comment on your representatives' suggestion that we probably feel that we have been "used" by the anonymous callers inasmuch as the leaks were minor and were not "reportable" under AEC criteria. No, we do not feel that we have been used but believe that the motivation of the callers was one of genuine concern and not out of vindictiveness. We believe that the public interest has, in fact, been well served.

We can understand that you were puzzled, slightly embarrassed and somewhat irritated that the callers should choose a third party as a communication channel. It could be interpreted that they did not trust you but hopefully your new regulation, which became effective on September 17, may improve their attitude. Further, you should not be surprised that the callers or their contacts did not come forward during your inspection. After all, it must have had all the appearances of a very special and important inspection. So much so it may have given an ominous impression that AEC or management were looking for someone. You also have to try to understand that since you must spend so much time with the management of those whom you regulate and therefore get to know them better, labor and the citizens, whose interests you are charged to protect, tend to think that you relate more and better to management. I suggest that there is a good deal of truth in this and that it will particularly remain so as long as we must also perform the nuclear promotional/advocacy/R&D role.

Let us now consider some of the specifics in this minor leak at the Cimmaron Facility:

- a. Was the waste plutonium nitrate low in radioactivity? Since the level reportedly exceeded the full-scale capability of the counter (over 100,000 d.p.m.'s) used by the employee, does this imply that employee's don't normally encounter levels this high? Do we know whether the radiation was closest to 100,000 or to 1,000,000 d.p.m.'s? What volume escaped?
- b. Given, that a radioactive and corrosive liquid (plutonium nitrate) is involved, the solidification procedure appears inadequate in that (1) an effective method was not being employed to verify that solidification was initially achieved nor was subsequently verified as being maintained and (2) There had been previous failures of the "Tiger Lock" compound which should have suggested the need for earlier corrective action and additional protective procedures.
- c. It was reported by your representatives that a precautionary technique of placing the disposal drum in a plastic jacket also failed inasmuch as it obviously did not contain the liquid waste.
- d. It would seem that the integrity and corrosion resistance of the storage drum was inadequate.
- e. A stainless steel pan-type bottom in the trailer is reportedly being used following this incident.

- f. Given, that the Cimmaron facility is (1) located on somewhat of a hill adjacent to and overlooking Cimmaron River (on South Bank); (2) in a region well known for tornadoes, turbulent storms, frequent moderately high winds and almost always a slight breeze, generally prevailing from the South; (3) in a region known for its cloud-bursts and wet periods alternating with periods of hot, seering, dry winds; and (4) is in an area known for soil wash and erosion from these weather extremes.

Consequently it seems patently obvious that there is a potential for a public health problem when flimsy trailers contain drums of questionable integrity. Predominant southerly winds may deposit minute particles of waste from leaks, spills (and the "normal" effluent as well) and deposit some upon the river bed and its sand bars. Regardless of the impact statement, it appears to be poor public policy, over a long period, to locate any such facility adjacent to a river.

- g. The hazard of drums developing a leak while enroute to the disposal site or the hazard of having the contents of the drums spilled in a highway accident.

In the design, construction and operation of ships, submarines, commercial aircraft and space vehicles it is common knowledge that they have never been continuously perfect in the accuracy of design, integrity of construction and judgement in operation. Consequently it is also common knowledge that innocent people have died as a result; however, usually no more than a hundred or so were involved per accident, all knew some risk was involved - considered acceptable and insurance underwriters did not find the risks too great. Now try to fit this parallel to the nuclear power age. An accident may involve thousands or millions of people, they think no risk is involved and the insurance experts will accept only a limited part of the risk. Where will we find and how do we train all of the super error-free human beings we will need for a continuously flawless design, construction and operation of the super nuclear power plants. Likewise for the fuel processing, transporting, reprocessing, storage, disposal and security systems. If we say that the risks must be accepted then we are acknowledging that people may die and if we are saying that we are playing GOD which we don't have the right to do. People have the right to know the risks.

We look forward to when you can take affirmative action to come to the people of Oklahoma like you have a new mouth wash to sell and say "Look good people, it is our job to tell you that a new nuclear operation is proposed for your community and we think that you should be aware that it has some risks as well as benefits." Isn't this similar in principle to what the Surgeon General says about the possible health hazard of cigarettes?

Respectfully,

Elene H. Younghein *Gaylord A. Younghein*
Elene H. & Gaylord A. Younghein