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September 18, 1978

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Dr. D. W. Moeller Advisory Committee on Reactor Safeguards U. S. Nuclear Regulatory Commission Washington, D. C. 20545

CT-1048

Dear Dade:

SUBJECT: COMMENTS ON JULY 24-25, 1978, WASTE MANAGEMENT SUBCOMMITTEE MEETING

Rags Muller, by letter of August 10, requested that we submit a report of our reactions on the matters we discussed in the July 24 and 25 meetings. Unfortunately, I was on vacation all of August and did not receive this request until after Labor Day. Consequently, these comments are quite late, but I hope they will still be helpful.

I must say that I was somewhat disturbed with the material we covered during these two days. It seemed to me that there is a great deal of effort being spent on "nice to know" information without recognizing the need for immediate concentration on some urgent matters. There are two items that come to mind quickly.

One: the need to license a low-level burial ground in the Midwest. While we discussed this problem at our previous meeting, we did not receive any indication of when the NRC would be able to clear up this problem and no real concern was indicated with the need to ship these wastes long distances as a result of this licensing problem. As I recall, no safety review was available to compare the relative hazards of shipping vs. burial.

Two: I am still concerned about the apparent lack of planning to provide equipment and facilities for transporting the large quantities of spent fuel or high-level waste that will require movement in the next five to ten years. There may be appropriate work going on, but we have not been able to identify this and I found very little interest in discussing the problem.

As was mentioned at the meeting, some of the material seemed to be pointed at obtaining research funds without much regard for the timing associated with the waste problem.

I do not have any specific comments on the Deutch Report or the activities of the Interagency Waste Management Review Group. Perhaps when they have completed their work we can make some constructive comments.

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I am enclosing my comments on the other matters we discussed.

Sincerely yours,

J. Hugh Warren Consultant

JHW: dp Enclosures

cc w/enc: R. Muller

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COMMENTS ON JULY 24-25 MEETING OF WASTE MANAGEMENT SUBCOMMITTEE

## 1. NUREG 0300, The Goals Document, & NUREG 0412, Essays

I had great difficulty in understanding this document as a goal document. From my experience as an administrator, I expected to find specific concise goals which may be used to measure progress. This document appears to be a summary of the processes involved in establishing goals for radioactive waste management, rather than an enumeration of the goals themselves.

It very well may be that this document has served its purpose as background material for the "Deutch Committee" and the Interagency Review Group which is preparing the National Policy on Nuclear Waste Management. I find it difficult to envision any other use for the document. It has occurred to me that this difficulty of viewing the document as a goals document may be the reason for so few comments from the public and private sectors. I think everyone at the Subcommittee meeting felt that the basic question of "What is an acceptable level of exposure?" must be addressed in any goal document.

I would suggest that the NRC give additional attention to the important area of better educating the public and of improving techniques for obtaining a halanced public input to the rule making process. The present system does not appear to provide a realistic cross-section of the opinions of the majority of the public. Since the success of any waste management system will depend on the support of the public, it would appear that much more of the effort should be spent in this area instead of in the purely technical areas.

## 2. NUREG 0456, The Classification Study

The authors of this work have adopted the simple concept of classifying the waste according to the method to be used in disposing of it, i.e.: 1) isolation, 2) near surface trenches, and 3) regular landfill. This approach, together with the further concept of classifying the wastes for disposal by sorting according to source, has distinct advantages from an operating point of view because it is simple and easy to implement. I commend the authors and encourage them to pursue this method. Since this method does have the disadvantage of forcing some waste to a higher classification, it would be useful to look for a companion method which would permit using a lower classification when analysis proved this to be appropriate; this would permit an operator to make cost analyses and use the appropriate method to provide the lower cost approach without sacrificing safety.

The study seems to have drifted into some unnecessary diversions. I could see no reason to dilute the effort by exploring radioactive release from coal ash and the disposal to the seabed.

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I agree with the rest of the Committee and consultants that a group of professionals in the fields related to human behavior should study the philosophical issues related to the responsibilities of the present generation to future generations and to what extent we have to assume the maximum stupidity factor (as, I believe, Herb Parker stated it).

As a last point, some consideration should be given to the chemical toxicity of the wastes as well as the radioactivity. There are perhaps some cases where this may be the more serious hazard in the future.

## 3. USGS Circular 779

I was particularly disturbed with the thrust of this paper. As pointed out by Dr. Parker, it has a very negative approach to geological disposal. This apparent attitude by the USGS will certainly give assistance to the opponents of nuclear energy. It is difficult to understand why, at this late date, the USGS would publish a document with such a discouraging review of the geological approach to waste disposal.

It appears to me that many of the research areas discussed deal with the academic or "nice to know" type of information rather than the essential knowledge needed to select a location and engineer a safe disposal site.

Since public acceptance of a site may very well be as important a factor as the technical perfection of the site, perhaps we need to spend some of this money educating people to the real hazards involved and preparing them to accept these wastes in their areas.

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