Historical Information
H.2 Biological Studies

Book 1


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December 22, 1969

Mr. Robert E. Miller, Manager  
Nevada Operations Office  
U. S. Atomic Energy Commission  
Post Office Box 14100  
Las Vegas, Nevada 89114

Dear Mr. Miller:

Members of the Ad Hoc Rulison Review Panel reconvened on December 22, 1969, to hear and discuss comments resulting from our report of November 21, 1969.

Comments of the Panel are herein again presented in two parts: (1) engineering and (2) bio-environmental aspects of the re-entry and testing operation. Modifications of our previous recommendations are the result of clarification of our comments as well as that of AEC and others associated with Rulison.

ENGINEERING

After a review of the limits imposed by AEC on the quantities of gas or other well fluids which can be allowed to escape, the Panel alters its opinion on BOP testing. Industry practice is not concerned with the loss of minute quantities of fluids from the well and some seepage is allowed to occur at test pressures. This loss is on the order of less than 10 cf/hr but we are informed that for the purposes of this operation AEC desires no measurable loss.

In view of the difference in test criteria, we would agree that the more frequent testing (once per day) and the testing of the Hydril to its working pressure is satisfactory. Implicit in this concurrence, is our understanding that replacement of rubber parts is anticipated upon the discovery of even the most minor leak.

The only operations which are to be restricted to daylight hours are the removal from or insertion of the drill string into the well bore under pressure. This also applies to producing strings of tubing and other downhole producing equipment.
In addition to the environmental monitoring program as described, the Panel would also urge that an effort be mounted to sample urinary tritium levels on some small number of local inhabitants, including children. Such measurements would be invaluable in validating dose estimates to the local population based on measurement of dietary and water levels. Such a sampling program should begin sufficiently in advance of reentry to provide adequate baseline data. This recommendation is made not from any concern that dose estimates as presented represent a hazard, but rather to provide confirmatory information which will be useful in subsequent Plowshare programs.

**SUMMARY**

In summary we can only reiterate what we stated in our previous report, namely, "Based on implementation of the above recommendations and the material presented to us during this review, we believe that completion of Rulison can be accomplished within acceptable safety standards."

Respectfully submitted,

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