

12 pages  
APPENDIX B

4 pages  
February 25, 1960

Reference Code - (40-3453)

Mr. H. L. Price, Director  
Division of Licensing and Regulation  
United States Atomic Energy Commission  
Washington, 25, D. C.

Dear Sir:

In my letter to you dated August 10, 1959, the following quoted paragraphs describe the Uranium Reduction Company's effluent and river sampling program.

"Our procedure with respect to the determination of concentrations of radioactive material discharged in liquid effluents has been to take, starting February 27, 1959, monthly samples of Colorado River water from a point one mile above the Moab Mill, a point 5 miles downstream, and another 10 miles downstream from the mill, as well as monthly samples of the tailings pond overflow into the river. These samples, up to and including June 23, 1959, have been sent to Combustion Engineering Corporation for radium analysis. The results of these tests may well be in our possession by the time you receive this letter.

"It is our intention to apply for an exemption to the provisions of 20.106, relating to the radium and uranium limits in our tailings pond effluent. We believe that it is reasonable to apply for an exemption because of our isolated location and because of the large volume of water flowing past the Moab Mill in the Colorado River. However, in order to present adequate data to the United States Atomic Energy Commission with the application for exemption, we plan to gather data for one year prior to the application. In addition to the sampling program described above, we plan to inaugurate a more extensive sampling program in the near future. This sampling schedule will be made in line with suggestions of the United States Geological Survey office located in Salt Lake City. This enlarged sampling program will enhance our data. The reason for this extended test period is to be in possession of complete information to cover the large seasonal variations in river flow so that a sensible and understandable presentation can be made."

Page 2

Reference Code - (40-3453)

Since the inception of this program, two conditions have developed which I believe warrant an extension of this testing program.

The first of these conditions is the conversion of our plant from an acid leach - RIP plant to a combined acid leach - alkaline leach - RIP plant. This conversion has resulted in a substantial reduction in radium concentration in our tailings effluent.

The second condition is the discovery by A. E. C. personnel in January, 1960 that the Modified Harwell analytical procedure for radium analysis which we have been using gave erroneously high results on tailings effluent samples due to co-precipitation of Thorium. Since our analytical results on tailings effluent have been negated by this discovery, we are in the process of changing our analytical procedure to correspond with that recommended by A. E. C. personnel at the seminar held in Idaho Falls in January of this year.

For these reasons I am requesting a one year extension of our sampling and testing program.

I would appreciate an early reply as to whether this meets with your approval.

Sincerely

R. F. Hollis  
Vice President-General Manager

RPH:nnw

Appendix B/2