

DML:DFK  
40-3453

APR 30 1965

Atlas Minerals  
Division of Atlas Corporation  
P. O. Box 488  
Moab, Utah

Attention: Mr. R. F. Hollis  
Vice President - Milling

Gentlemen:

Pursuant to your request dated March 29, 1965, AEC Source Material License No. R-161 is hereby amended to include the following:

"The licensee is hereby authorized to discharge into unrestricted areas liquid effluents containing concentrations of radioactivity in excess of the limits specified in Appendix B, Table II, Part 20, in accordance with the procedures described in the licensee's application dated November 29, 1960, as supplemented October 11, 1962, January 28, 1964, and March 29, 1965, and subject to the following conditions:

1. The ratio of the concentration of radium-226 in the effluent to the concentration limit specified in Appendix B, Table II, Column 2, 10 CFR 20, shall not:

A. Exceed  $\left( \frac{6000}{(\text{effluent flow rate in gallons per minute})} \right)$  averaged over a one year period.

B. Exceed 20 at any one time.

2. The concentration of all other radionuclides in the effluent stream shall not exceed the applicable limit specified in 10 CFR 20.

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3. The effluent stream at the point of release to the unrestricted area shall be substantially free of radioactive material contained in suspended solids and shall be sampled continuously or semi-continuously at no greater than hourly intervals and analyzed for radium-226, thorium-230 and natural uranium. Sample size shall be proportional to the effluent flow rate and shall not be composited for purposes of analysis over periods greater than one month.
4. As a minimum, sample location nos. 4, 5, 6, 7, 8 and 9 described in Exhibit No. 4 of the licensee's application dated October 11, 1962, shall be sampled monthly and analyzed for radium-226, thorium-230 and natural uranium. Surveys must provide data sufficient for estimating the effects of the effluent discharge on concentrations of radioactive material in receiving streams.
5. Records shall be maintained of Colorado River flow rates in the vicinity of Moab, Utah, of effluent flow rates and of survey results required by this amendment.
6. The licensee shall file a report with the Commission no later than April 30, 1966, showing the results of surveys required by this authorization including effluent and Colorado River flow rates.
7. This authorization shall expire April 30, 1966."

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