

NOV 23 1962

DIA:DFH
40-3453

Atlas Minerals
Division of Atlas Corporation
Box 488
Moab, Utah

Attention: Mr. R. F. Hollis
Vice President

Gentlemen:

Pursuant to your application dated November 29, 1960, as supplemented October 17, 1962, and to Section 20.106(a) of 10 CFR Part 20, Source Material License No. R-161 is hereby amended to add 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 17, 1962 and subject to the following conditions:

1. The sum of the ratios of radium-226, thorium-230 and natural uranium concentrations in the effluent to their respective concentration limit specified in Appendix B, Table II, column 2, 10 CFR Part 20, shall not exceed five (5) averaged over a one year period at a flow rate of 1500 gallons per minute (gpm). In any period where the effluent flow rate is less than 1500 gpm, the concentration limit derived as specified above shall not exceed 25. In any period where the effluent flow rate is greater than 1500 gpm, the concentration limit derived as specified above shall be decreased proportionately.
2. 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.

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3. 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. Radioactivity surveys must provide data sufficient for estimating the effects of the effluent discharge on concentrations of radioactive material in receiving streams.
4. 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 conditions 2 and 3 above.
5. The licensee shall file a report with the Commission no later than December 31, 1963, showing the results of surveys required by conditions 2 and 3 above including effluent and Colorado River flow rates and describing progress that has been made in developing means of reducing concentrations of radioactivity being discharged to unrestricted areas.
6. This authorization shall expire December 31, 1963.

FOR THE ATOMIC ENERGY COMMISSION

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(Signed) Acting
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 Division of Licensing and Regulation

Director
 Division of Licensing and Regulation

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FOR THE ATOMIC ENERGY COMMISSION

Acting

Director

Division of Licensing and Regulation