UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

JAN 26 1994

URFO:DCW
Docket No. 40-3453

MEMORANDUM FOR: Docket File No. 40-3453

FROM: Dana C. Ward, Project Manager

SUBJECT: MEETING WITH ATLAS CORPORATION TO CLARIFY TECHNICAL QUESTIONS OF NOVEMBER 29, 1993, AND JANUARY 3, 1994

MEETING DATE: January 13, 1994

Participants:

NRC

Ramon E. Hall, Director, URFO
Joe Holonich, Branch Chief, HQ
Edward F. Hawkins, Deputy Director, URFO
Dan Gillen, Section Leader, HQ
Ted L. Johnson, Hydrologist, HQ
Daniel Rom, Geotechnical Engineer, HQ
Allan Mullins, Project Manager, HQ
Elaine Brummett, Project Manager, HQ
Ray Gonzales, Project Manager, URFO
Joel Grimm, Project Manager, URFO
Dana Ward, Project Manager, URFO

ATLAS CORPORATION

Richard E. Blubaugh, Vice President of Environmental & Government Affairs

CANONIE ENVIRONMENTAL SERVICES

Oliver Wesley
Bruce Hassinger
Frank Filas

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OBSERVERS

Lon Q. Hesla, EPA Region VIII
Geoff Freethey, USGS-WRD
Peter Haney, Grand County Council
Scott D. Hacking, State of Utah
Michael Duwe, NPS-Rocky Mtn. Reg. Office

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Summary of Discussions: On January 13, 1994, a representative of Atlas and his consultant, Canonie Environmental Services, met with the NRC in Denver, Colorado. The public meeting was held at the request of Atlas to discuss and clarify two sets of technical questions presented to Atlas by letters dated November 29, 1993, and January 3, 1994. There were brief introductory remarks by both Mr. Ramon Hall and Mr. Joe Holonich concerning the format of the meeting and that the burden of proof for all questions lies with the licensee. The floor was given to Atlas.

Atlas is concerned that many of the questions posed by the NRC have already been answered in previous studies and correspondence. Atlas is also concerned about the high costs of continued requests and reviews of information by the NRC. Atlas further stated that they are doing extra work to comply to Title I sites rather than Title II. (Mr. Holonich assured Atlas that they were not being asked to do more than any other Title II site.) Atlas hopes that the outcome of this meeting will be to better define the scope of work for their consultant, Canonie Environmental Services.

Atlas requested that discussion proceed from Enclosure 2, followed by Enclosure 1 of the November 29, 1993, letter and end with the January 3, 1994, Enclosure.

NOVEMBER 29, 1993, ENCLOSURE 2

A. Erosion Protection

1. Cliffs

Atlas will review and submit a variety of historical data in an attempt to justify that debris from the nearby cliffs will not affect proposed drainage channels. Atlas also has the option to redesign the channels and submit that revision to the NRC if an adverse affect is determined.

2. Moab Wash

Atlas will revise the design of the erosion protection for the Lower Impoundment Drainage Channel along with the redesign of Moab Wash.

B. Radon Attenuation

1. Valid representative values

Atlas attempted to justify the sampling methods and the values obtained for the radiological samples collected within the tailings enclosure. Additional information will be presented to the NRC for review and consideration of the values obtained.

2. Ra-226 background value

Atlas defended their 5.5 pCi/g value established for a small area cleaned up under License Condition 39(B). No definitive conclusion was made on how Atlas should proceed to redefine the background at the mill. Currently the staff feels that the background value is too high. There was some indication by Canonie that background values might be reanalyzed towards the end of reclamation. Atlas was cautioned that by waiting to resolve this issue, they were running the risk that the design would need to be modified in the future. This would result because the amount of windblown material that must be cleaned up and put on the tailings pile is directly dependent on this background value.

3. Long-term moisture content

After discussions on how moisture content was determined for the Atlas site, the licensee committed to using the long-term moisture content of 10 percent for fines and 20 percent for clay material. These values were specified in the November 29, 1993, letter as being acceptable to the NRC.

4. Revise the design of radon barrier

Atlas will submit a revised design for the radon barrier.

C. Construction Specifications

1. Correct reference

The reference will be corrected. ASTM C 127 will be used in place of ASTM C 97.

2. Durability testing

Atlas will perform the durability testing at the same frequency as specified for riprap in Sec 9.3.4.1 of the specifications dated April 14, 1993.

D. Settlement

1. Quantitative settlement

Atlas will define the start time of settlement monitoring and will use field testing over laboratory testing to assure that 90 percent of expected settlement has occurred prior to placement of the radon cover.

NOVEMBER 29, 1993, ENCLOSURE 1

A. Potential Faulting and Seismic Considerations

Discussions centered on the existence of a fault under the tailings impoundment and peer group review of Utah Geological Survey (UGS) recent findings relative to faults in the Moab area.

1. Capability of surface rupture

Atlas will review existing data and contact UGS. The licensee committed to design for a .21 ground acceleration for a floating earthquake on the Colorado Plateau. The NRC stated that this may be appropriate for a floating earthquake, but may not be acceptable if the Moab fault is under the site and is considered Capable. Atlas is considering the services of a seismologist to more fully explore this issue.

It was agreed that a separate meeting should be scheduled to discuss faulting at greater detail.

2. Seismic potential

The licensee has started to gather data in this area. Preliminary information demonstrates an apparent decline in seismic potential due to a regionally dryer climate than in the past; faulting in the past is attributed to dissolution of underlying salt formations. Also, the nearest oil production is determined to be 12 miles away from the site, and therefore, the potential for oil production causing fault movement is very low.

3. Maximum Credible Earthquake

The licensee will submit information and design parameters in an attempt to satisfy the concerns in this area. Contacts with UGS will be conducted (see No. 1 above).

B. Geomorphic Stability

1. Colorado River as an erosive force

The licensee position is that the river will not erode into the tailings pile, and in fact, that the river is eroding the other direction (east). The NRC has no basis to conclude that this will be the case for the design life of 1000 years. Atlas will have to provide reasonable assurances that erosion will not occur. Alternatively, they will have to design for this possibility.

QUESTIONS FROM JANUARY 3, 1994, LETTER

The questions contained in the January 3 letter were reviewed by the staff for the benefit of the licensee. Little discussion was forthcoming because the licensee had not had the opportunity to review the letter in sufficient detail. The NRC concerns regarding the basic data used by the licensee were discussed, and the alternatives to additional field surveys were addressed. The licensee indicated that the content of the questions was understood.

SUMMARY

Atlas will submit a response to many of the questions from the November 29 letter within the 60-day response period, but they will request an extension on some questions where additional research is needed. Atlas was given notification at the end of the meeting that a set of Environmental questions would soon be forthcoming.

Dana C Ward

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Project Marager

JAN 26 1994

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