

GEOLOGICAL SERVICES

"SERVING THE FOUR CORNERS AREA"

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CONSULTING
MINING GEOLOGISTS

April 24, 1996

Joseph J. Holonich, Chief
U.S. Nuclear Regulatory Commission
Division of Waste Management
Office of Nuclear Materials
Safety and Safeguards
Washington, D.C. 20555-001

Dear Mr. Holonich:-

Thank you and you commission for the privilege of making the following comments as to the Reclamation of Uranium Tails at the Atlas Site, NW Moab, Utah Valley. Without reservations, I support the concept of burial in place, or capping.

As to my background and the long-time related experiences I wish to state the following:-

MY BACKGROUND AND HISTORY

1) As a shipper's representative for custom producers shippers to five of the seven mills in the Four Corners Region, I spent 31 years on a part to 50 % time, including the most time spanning 25 years (October, 1959 thru July, 1984) at the Moab Plant. Also over 3 years at the Mexican Hat mill, 2 years at the Tuba City mill one year at the Shiprock mill ~~and seven years for the principal~~ Royalty Holders, including two, also for the Custom Producers at Rio Lisbon plant.

I can rightfully say that I become an expert on the shipping crushing and sampling of raw ores.

2) I am a certified professional geologist by the American Institute of Professional Geological Scientist, # 2193, 1970. I become a Geologic Consultant at age 27 and still do some Reviews and recommendations on older properties, now idle by the extreme low in U.S. Uranium Industry.

Most of my exploration supervision was in the search of new or expanding ore deposits found in the Chinle formation, the bulk of which shipped to the Moab mill, Mexican Hat and Rio Algom Lisbon plants.

GEOLOGICAL SERVICE - MOAB, UTAH

Page 2.

My primary area of expertise included all uranium and vanadium deposits in the general Four Corners Region, including considerable amounts of work with the proven reserves in the Grants Mineral Belt, New Mexico. I also traveled the five western states on the Reconnaissance of possible new projects for major and small corporations and individuals. Most of this consulting work is the Evaluation of, and recommendations as to the possible project-expenditures toward the search and development of new favorability of belts, trends and the finding, drillhole expansion of new deposits and of known deposits in the areas of studies.

I guess, and quoted as being, become an expert in the Chinle formation deposits, trends, belts of favorable exploration.

3) Included in the Cancer risks and history, my older brother, D.C., worked in smaller Uranium-Vanadium mines from 1941 thru the late 1970's. He did develop Colon Cancer, which was removed, and the Cancer arrested. D.C. died in 1993 at age 72 from diagnosed Black Lung and Emphysema. He had work the last ten years in a coal mine near Price, Utah. He also was a longtime smoker, he did not have any known cancer, at the time of death.

I am 69 years old, Trim and Fit, having exceptionally good organs, including the lungs, heart, liver and others. I have very low blood pressure rates, a good heart beat rate and really enjoy a quality life in the Moab area. I am the example on a healthy life, after many years of exposure to low levels of radiation from raw ores at mines, mills and drilling projects. I do not doubt the dangers of heavy smoking, radon gas and dust combination.

ATLAS CORPORATION AND THE COMMUNITY

4) I would like to praise and show my appreciation to the Atlas Corporation and its former corporations merged into the parent corporation. Atlas operated a most fair, reputable outstanding Image in the industry and community. I can truefully and rightfully relate to some forty years, 1956, commenced milling, up to present-1996. From day one, the Uranium Reduction Corporation 1954 the participated in community projects including the building of a new nine hole golf course-One green was the duty of Mitch Melich, Vice President, and other duties in the overall new course by the corporation. This was the begining of a most successful and well played eighteen hole Moab Municiple Golf Course operated by the Moab Country Club, on the Moab City Culinary primary water source-supply. In the 1950's Uranium Reduction gave 50% of the Skakle spring to the Moab City in exchange for the Water and Sewer connections to the new company housing subdivision-Palisade, NW Moab.

At the Moab mill, as the new safety-health rules came down Atlas abided by all, and insisted that we as visitors do the same. My firm became a watchdog for fairness for both our clients and Atlas. The Atlas personnel did the same with us. No finer working relations were known anywhere in the industry.

GEOLOGICAL SERVICE - MOAB, UTAH

Page 3.

CONCLUSIONS

Up thru 1970 we all work toward the finding, development of and production of Yellowcake for the U.S. Atomic Arsenal, under the Atomic Energy Act. We thought of this as our jobs and also our patriotic duty. During the OPEC embargo of the 1973 thru 1973 era, our demand for electrical power produced from Nuclear Power plants rose from 4 % U.S. requirements to the high 40% Nuclear. By 1978 we had on order some 231 plants in the United States. The picture changed to over 50 % reduction in the completion of U.S. plants,

It is my understanding that approximately 56 % of the Moab Tails belong to the A.E.C. for the arsenal production. It is also my understanding that Atlas was required to meet Requirements for future reclamation of the tails with each expansion and raising of the tails pond coming in the 1960's til final.

Since 1970, I have taught, mainly lower division Geology Courses for Extension Divisions of Utah State University of Logan, Utah, and the past two years the College of Eastern Utah, Price, Utah. One of the favorite courses is termed Moab Geology, 490, U.S.U., normally taught during Spring Quarter. This is a special topics science course consisting of six lectures by myself plus four from guest lecturers from the Park Service, BLM, mining and oil. This course was structured first in 1970, upon the advisement and help for all three representation. We pretend to know well the structural and physical history and present day geology of the Moab Salt Core anticline. When it comes to possible quake caused rupture and breaks in the brittle formations of this structure we believe that there is a great advantage by being over Salt beds and intrusions anywhere in the center or floor of the valley proper.

As a longtime resident of Moab valley, having love and devotion to the concerns of health-safety and the Environment, both past and future, and not only for me and my family but my friends and voters, I do not dread or doubt the wisdom of capping the tails in place. After much serious thought, research and examination of reclaimed Rio Algom-Lisbon, Tuba City and Mexican Hat tails, it only makes good sense to me to cap the Moab Tails, in place. The Mexican Hat Tails are capped within less than one mile of the San Juan River, with pervious Mesozoic units of possible solution migrations to the river. The high ratio of clay minerals coming in the bottom liner of the ponds really form fine impervious layers. In 1991, I sampled the Underflow liner materials in the Keystone Wallace No. two pond for Grand County Commission. This liner came from the Dakota sandstone mainly. I doubt very much that it contains anywhere near the clay minerals as do the Chinle production at Moab. Our tests from commercial Lab in Salt Lake came back, with amazement by the state Enforcement agencies as one of the best natural liner materials known anywhere in the state of Utah. Carelessness by overflowing to levels above the sloping liner led to brine contamination in the monitoring wells in the mid 1990's. I officially notified the commission too late to eliminate the problem.

GEOLOGICAL SERVICES— MOAB, UTAH

Page 4.

I am now serving my 33 rd year on the Moab City-Council and Mayor board. I served as mayor from 1974 thru 1977. My main expertise here lies with ground water of our Spring and Well area, partially covered watershed by the municipal golf course, a segment of the fault rich water laden flank of the Moab anticline being recharged by the Mill Creek Drainage. I also have spent considerable time as a councilman with the Utility department, embracing water, sewer, storm drainage, streets, Bike routing lanes, curbs and sidewalks. My city service as an elected official first came in 1956. All of us, thru maturity becomes more aware of the Environment we reside and work in. This is also my case; however, after much consideration as to the potential dangers to Moab Valley population, and having reviewed the reports by the NRC, Atlas and their consultants, I DO NOT have any problem in full endorsement to the plan for capping these very low level mill tails in place.

I have not chosen to become "Vocal" in the hearings. It is obvious that I come from the "Bias" or favorable side and I would immediately be branded the same.

Thanking you, for this opportunity to express myself, and please excuse the quality of this typing-my wife and word processor is out./

I remain, respectfully



W. Dean Mc Dougald
Certified Professional Geologist (retired)
2193
Educator and Elected Official
of Moab City.
WDMC/wdmc

Copies to: Richard E. Blubaugh, Carl Dixon, Dale Edwards and Robert Pattison of the Atlas Corporation.
Elected U.S., State, County and City officials to include: U.S. Senator Orin Hatch, Senator Robert Bennett, U.S. Congressmen Bill Orton, U. S. Representative James Hansen, State Senator Mike Dimitrich, State Representative Keele Johnson, State OF Utah Honorable Governor Michael O. Leavitt, members of the Grand County Council, Moab City Mayor, members of City Council and the Moab Chamber Commerce