



Social Services

Scott M. Matheson, Governor, State of Utah
Anthony W. Mitchell, Ph.D., Executive Director

September 22, 1978

Plateau Resources Limited
772 Horizon Drive
Grand Junction, Colorado 81501
and
141 East First South
Salt Lake City, Utah 84111

Re: Shootering Canyon Processing Facility

Gentlemen:

Enclosed are memoranda from our Bureaus of Water Pollution Control, Waterworks, General Sanitation and Radiation & Occupational Health concerning the documentation received to date on the above referenced project.

Although plans for air pollution control facilities were approved on February 28, 1978 it is apparent from the self-explanatory enclosures that several matters remain to be resolved and that approval of plans and specifications for wastewater disposal facilities and culinary waterworks still must be obtained.

It will also be necessary to establish permanent control of a "buffer zone" which prohibits any development except that under the control of Plateau Resources within 3/4 mile of the edge of the tailings disposal site.

We anticipate receiving the necessary detailed plans in the near future.

Very truly yours,

Richard C. Hansen
Associate Deputy Director of Health
Environmental Health Services Branch

RCH:mkh

cc: U.S. Nuclear Commission
Woodward - Clyde Consultants
Southwestern District Health Department

7811140020
~~7811140045~~

Division of Health
Environmental Health Services Branch
James D. Clise
Deputy Director of Health

150 West North Temple, Suite 426
P.O. Box 2500, Salt Lake City, Utah 84110
801-533-6121



Social Services

Scott M. Matheson, Governor, State of Utah
Anthony W. Mitchell, Ph.D., Executive Director

August 30, 1978

MEMORANDUM TO: Dennis Dalley
Associate Deputy Director of Health

THROUGH: *JS* Gayle J. Smith, Director
Bureau of Waterworks

FROM: Tim Pine *TP*
Public Health Engineer
Bureau of Waterworks

Re: Comments on Shooting Canyon Uranium Project Water Supply

1. There is evidently already an operating mine at the site which now employs around 75-80 people. We have not approved plans for the pumping, storage and piping facilities of the existing system. No evidence of legal right to culinary use of the water was presented nor have we seen the "Report of Well Driller" for this particular well. This information was requested in a letter to Plateau Resources' Mr. Peter Toocker on September 27, 1977.
2. Section 12 of the Environmental Report fails to mention the requirement for Bureau of Waterworks approval prior to construction of the water system.
3. The water supply for the project appears to be relatively secure from any contamination from tailing's pond seepage. The Carmel formation (160 ft. thick and said to be "relatively impervious") lies between the Entrada formation and the Lower Navajo formation from which culinary water will be drawn. Nonetheless, it is advised that our lab do a thorough chemical and radiologic analysis of the culinary well water prior to tailings pond construction to establish firm "baseline" data on culinary water quality.
4. Culinary water for the mine is currently supplied by a "Well G-3" which taps the Navajo sandstone and is said to yield 50-75 GPM. The chemical and radiologic quality of this water appears acceptable. To serve this project, a well field will be developed to extract up-to 400 GPM from the Navajo formation. Plans and specifications for all culinary wells must be approved by the Bureau of Waterworks prior to construction.

rs

Division of Health
Environmental Health Services Branch
Lynn M. Thatcher
Deputy Director of Health

150 West North Temple, Suite 426
P.O. Box 2500, Salt Lake City, Utah 84110
801-533-6121



Social Services

Scott M. Matheson, Governor, State of Utah
Anthony W. Mitchell, Ph.D., Executive Director

(801) 533-6146

August 23, 1978

MEMORANDUM

TO: Dennis R. Dalley, Acting Deputy Director of Health *DRD*
THROUGH: Calvin K. Sudweeks, Director, Bureau of Water Pollution Control *CWS*
FROM: Steven R. McNeal, Public Health Engineer *SRM*
SUBJECT: Environmental Report Plateau Resources Shootering Canyon

We have reviewed the following three reports regarding the Plateau Resources proposed Shootering Canyon Uranium mill:

1. Environmental Report.
2. Preliminary Geotechnical Engineering Report.
3. Tailing Management Plant.

The Uranium mill will have a 70 acre tailings area with runoff contained behind a 100 foot high dam. The tailings pond will have a two foot clay liner to limit the 1.5 pH solution seepage to .02 inches/day. To further assess possible ground water effects the following additional information should be submitted:

1. Radium and heavy metal dissolved concentrations in the tailings pond.
2. Anticipated dissolved Radium and metal seepage concentrations in the soil.
3. Feasibility and advantages of neutralizing the effluent.
4. Potential extent and chemical reaction in the underlying geologic formation as suggested on page 34 of the Geotechnical Report.
5. Results of the tailings solution effect on the clay liner permeability for test periods longer than two weeks.

Division of Health
Environmental Health Services Branch
Lynn M. Thatcher
Deputy Director of Health

150 West North Temple, Suite 426
P.O. Box 2500, Salt Lake City, Utah 84110
801-533-6121

Memorandum to: Dennis R. Dalley Cont.

Page 2

Besides the above information detailed plans on the tailings dam, liner, installation tailings line, septic tanks, drainfield percolation rate and drainfield soil conditions will be needed before we can complete our construction permit review.

SLC:ncb



Social Services

Memorandum

To: Richard C. Hansen
Associate Director
Environmental Health Services Branch
From: Mervin R. Reid, Director
Bureau of Sanitation

Date: August 25, 1978

Subject: Shootering Canyon Uranium Project, Garfield County

The plans for the above project have been reviewed by this department and we offer the following comments for your consideration:

1. Plan page 2-23. At some future date the plan indicates that a town will be constructed by a private developer. Prior to selection of a site an area must be selected for the townsite which will be amenable to the installation of individual sewage disposal systems. Factors to consider to appraise the site for such systems includes:
 - a. Soil percolation tests must be made as specified in Section IV-27, Code of Waste Disposal Regulations, Part IV, normally at the rate of at least one test per acre, and complete results submitted for review. Seepage test hole locations must be shown on the subdivision plat. If percolation tests show seepage times exceeding 60 minutes per inch, seepage methods of disposal will not be possible.
 - b. If ground surface slopes exceed about 4", or if drainage channels, ditches, ponds or watercourses are located in or near the development so as to complicate design and location of individual wastewater disposal systems, a detailed disposal system layout must be provided for the lot presenting the greatest design difficulty. Absorption systems should be located at least 100 feet from any watercourses or ponds.
 - c. A detailed report must be submitted to show a comprehensive log of soil conditions throughout the development to a depth of at least 4 feet below the bottom of proposed wastewater seepage facilities. Soil cover throughout the area must be adequate to insure at least 4 feet of suitable soil between bedrock (or any other impervious formation) and the bottom of wastewater seepage devices (such as trenches or pits) used for disposal of septic tank effluent. Otherwise, seepage methods of disposal will not be possible.

- d. A statement must be submitted indicating present and maximum anticipated ground water elevation throughout the development. If there is evidence that ground water ever rises to within 1 foot of the bottom of proposed wastewater seepage devices or within 4 feet of finished grade (ground surface), seepage methods of disposal will not be possible.

Issuance of a feasibility statement based on the above information will specify that all detailed planning and construction must be completed in accordance with existing codes, that final inspections will be made by the local health department to determine compliance with such codes, and that actual construction of any wastewater disposal system may not begin until written approval of detailed plans and specifications has been obtained from the local health department.

JEH:pt



Social Services

Scott M. Matheson, Governor, State of Utah
Anthony W. Mitchell, Ph.D., Executive Director

July 11, 1978

MEMORANDUM TO: Dennis R. Dalley
FROM: Larry F. Anderson *L.F.A.*
SUBJECT: Shootering Canyon Uranium Project

We were unable to find any mention of the 3/4-mile buffer zone in the Shootering Canyon Environmental Impact Statement. The project will not comply with the Branch requirements without this buffer zone.