

PDR



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 22 1978

FCPF:LWR
Docket No. 40-4492

Federal-American Partners
ATTN: Mr. Floyd D. Jackson
Director of Safety and Personnel
Gas Hills Star Route
Riverton, Wyoming 82501

Gentlemen:

In your tailings dam report by F. M. Fox and Associates, you state that the calculated seepage rate from pond No. 1 is 0.40 cfs (180 gpm). In the June 16, 1978, revision to that report and in F. M. Fox's July 26, 1978, letter on additional groundwater information, you have stated that you are initiating several mitigating measures designed to reduce the seepage from tailings dam No. 1 to 50 gpm. The value of 50 gpm total seepage from both impoundments was given to you as a target for reducing your seepage because of the existing high levels of seepage and because seepage as high as 50 gpm has been found to be acceptable at some sites.

The actual level of seepage acceptable at your site however must be determined through environmental assessment and consideration of performance objective three of our Branch Position on Uranium Mill Tailings Management which states, "Design the isolation area such that seepage of toxic materials into the groundwater system would be eliminated or reduced to the maximum extent reasonably achievable." Therefore, for our environmental assessment of your operations, we require that you submit for our review your evaluation of the environmental impacts of seepage from your tailings impoundments. This evaluation should address past, present, and future seepage, the resulting impacts, and the effectiveness of your tailings management program in reducing the seepage of toxic materials into the groundwater system.

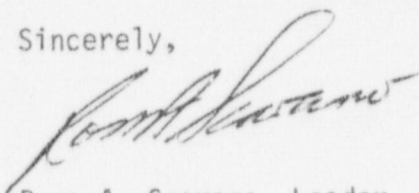
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The following items should be included in your evaluation. Seepage investigations (sampling) should be extended along the remaining portions of the perimeter of pond No. 1. Groundwater contours and chemical and radionuclide analyses should be provided for the entire area of your investigations. By comparison of these analyses with the natural background water quality show the extent of seepage contamination. Discuss the eventual fate of the contaminants in the seepage and provide the basis for your conclusions. Discuss the potential for contamination of soils and vegetation along the seepage path. Provide radionuclide and chemical soil profile analyses along the seepage path. Provide vegetation analyses along the seepage path. Besides radionuclide analyses, lead and any other toxic element suspected of root uptake should be included in the elements reported for the vegetation analyses. Vegetation samples for seepage analyses should be washed prior to analyses. The wash water should also be analyzed to determine the extent of deposition of radionuclides on vegetation. Discuss the effects of any present or proposed actions designed to limit the effects of seepage.

Also in an item unrelated to your seepage investigations but requiring additional soil analyses, please provide for our environmental assessment the soil profile analyses you have done for the area of potential contamination downwind of tailings pond No. 2 and in Willow Springs Draw, a soil profile analysis for radium under the ore pad, and the radium content as determined by analysis of the overburden to be used for reclaiming the tailings area.

Because of the time involved in analysis of soil, water, and vegetation samples, we ask that by October 13, 1978, you should provide us with your schedule for responding to these requests. If you wish to discuss this request, please contact Mr. L. Rossbach (301/427-4103) of my staff.

Sincerely,



Ross A. Scarano, Leader
Mill Licensing Section
Fuel Processing & Fabrication
Branch