

PATHFINDER

A Cogema Resources Company

May 9, 1996

Mr. Joseph J. Holonich
Chief, Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Ref: Docket No. 40-2259
SUA-672

Dear Mr. Holonich:

Pathfinder proposes the following modifications to the soil cleanup program (Appendix H, Volume II, of the Lucky Mc Mine Tailings Reclamation Plan) as a result of the telephone conversation earlier today between Pathfinder and Elaine Brummett of your staff:

1) The GPS based gamma survey method will be the primary means of identifying contaminated soils for cleanup. Gamma spectrometry equipment will be provided on site by ERG during the bulk of the cleanup program to allow daily confirmatory checks of the adequacy of Ra226 cleanup as an augment to the vendor laboratory analyses. The calibration and quality control for the on site gamma spectrometry will be sufficient to allow acceptable correlation with the laboratory analyses. Standard operating procedures for the gamma spectrometry will be available at the site for inspection.

2) During the initial phase of the cleanup of soils in the general mill vicinity and the area of windblown tailings contamination, thirty 100 m² decontaminated plots with higher gamma values approaching the proposed action level for gamma will be sampled for confirmatory soil analysis of Ra226. Twenty of the plots will be located in the mill vicinity, and ten plots will be in the windblown tailings area. Any of the twenty plots in the mill vicinity that are located in areas suspected of containing ore remnants in disequilibrium will also be analyzed for natural uranium and Th230. The NRC Branch Technical Position of 1981 will be utilized for guidance in evaluating the adequacy of the cleanup of uranium. The adequacy of the cleanup of Th230 will be evaluated based upon the projected 1000 year Ra226 level. Results of this initial phase sampling will be forwarded to the NRC within two weeks of receipt of the data by Pathfinder.

3) The text of the soil cleanup and verification plan (Appendix H) will be revised to state that the three highest gamma count 100 m² plots within each 500 foot by 500 foot decontaminated block will be sampled for determination of

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Ra226. This effectively triples the routine confirmatory soil sampling frequency compared to the original proposal.

4) If, as a result of the initial sampling program as described in item 2 above or the routine confirmatory monitoring program, it appears that the originally proposed gamma action levels are not sufficiently conservative to assure cleanup of Ra226, the action levels will be adjusted downward.

5) Additional standard operating procedures will be developed as required to address such issues as uranium cleanup in the mill vicinity, and confirmatory monitoring and soil sampling in areas of deeper excavation.

6) Five percent of the samples submitted to the vendor laboratory for gamma spectrometric analysis for Ra226 also will be analyzed for Ra226 by wet chemistry. This proposed level of additional confirmatory analysis is felt to be adequate in light of the consistent adequacy of gamma spectrometry for Ra226 determination. The use of gamma spectrometry on site also justifies less emphasis upon wet chemistry by the laboratory.

Pathfinder will still be conducting the further evaluations of Reid Draw and the solution ponds area this summer in order to develop proposals for those areas.

Sincerely,

T. W. Hardgrove
Coordinator of Mine Environmental Affairs

cc: E. L. Nugent
K. Baker, ERG