

#### UNITED STATES

#### NUCLEAR REGULATORY COMMISSION

#### **REGION IV**

URANIUM RECOVERY FIELD OFFICE BOX 25325 DENVER, COLORADO 80225

APR 0 5 1989

URFO: RSH

Docket No. 40-8903

SUA-1471 04008903220E

MEMORANDUM FOR:

Docket File No. 40-8903

FROM:

Ralph S. Heyer, Project Manager

Uranium Recovery Field Office, Region IV

SUBJECT:

WINDBLOWN CLEANUP AT HOMESTAKE MINING COMPANY'S MILAN MILL

### Background

By letter dated November 28, 1988, Homestake Mining Company (Homestake) submitted the results of "Phase 2" to their windblown tailings cleanup program at the Milan Mill.

The licensee's cleanup action was documented in a report providing sample results as required by License Condition No. 19 of Homestake's Source Material License SUA-1471. The condition requires that cleanup of windblown tailings proceed in a clockwise fashion around the tailings impoundment. The total cleanup is to be conducted in three segments, each with a specific deadline for completion of cleanup and subsequent documentation. The licensee's cleanup actions documented by the November 28, 1988 submittal are for the area east of 494000E as shown on the map accompanying the licensee's submittal. The staff review of the licensee's submittal is discussed below.

### Discussion

The contaminated area east of 494000E, designated as Area No. 2, is the area required by Homestake to be cleaned up by October 1, 1988. The cleanup actions were completed prior to October 1, 1988. Portions of the contaminated area east of 494000E were cleaned up prior to March 1, 1988 as documented in Homestake's May 31, 1988 report.

The minimum depth of soil removed from Area No. 2 was six inches. In some areas, soil was removed to a depth of 12 to 15 inches as a result of soil buildup around brushy areas. During cleanup of "Area No. 2", Homestake monitored the radium concentrations of top soils to determine whether adequate removal of contaminated soil was being accomplished. The soil sample ana sis results were documented on a grid system and plotted on a map enclosed with the

OFOR

8905080396 890405 PDR ADOCK 04008903 C PDC

2

November 28, 1988 submittal. According to Homestake, Area No. 2 has been cleaned to meet the NRC standard of 5 pCi/g Ra-226 in soil above background (10 CFR 40, Appendix A, Criterion 6). There were several results, outlined in the licensee's map, that still exhibited elevated Ra-226 following cleanup actions. According to a discussion between Mr. Ed Kennedy of Homestake and Mr. Pete Garcia of URFO on March 10, 1989, those areas which still exhibit elevated Ra-226 levels were near the storage building, lab building and associated septic systems. These facilities, which were previously utilized by Homestake, are no longer in use. Mr. Kennedy stated that cleanup activities were conducted as close to the facilities as was possible without risking damage to equipment. Also, one elevated reading was on the hillside near the edge of the gravel pit and would present a safety concern to workers cleaning the area. Homestake attempted to clean the soil as close to the edge of the pit as practicable.

Homestake also stated that there is an area approximately 30 feet wide along the east side of Highway 53 that was not included in the Area No. 2 cleanup. This area is located adjacent to the state highway. Homestake believes the cleanup of the soil constitutes a traffic hazard and danger to both workers and the public. The area also includes a fence which restricts access to Homestake property. The fence would have to be removed for soil cleanup to proceed. The fence will be removed during site decommissioning activities. Homestake therefore proposes that this area be cleaned only once during closure activities.

# Conclusion

The staff review of the licensee's November 28, 1988 submittal indicated that soil cleanup and documentation was performed in accordance with License Condition No. 19 of Source Material License SUA-1471. All areas which will require cleanup at decommissioning are located within the Homestake property boundaries. The fence and the facilities located east of Highway 53 will be removed and the area cleaned to release limits during mill decommissioning. The staff recommends, however, that during the next licensing action, the Homestake license be amended to require cleanup of the area east of Highway 53 upon termination of mill activities. This will ensure that this area will not be missed during final cleanup.

Ra/ph S. Heyer, Project Manager Uranium Recovery Field Office Region IV

Approved By:

R. Dale Smith, Director

Uranium Recovery Field Office

Region IV

Case Closed:

04008903220E

## DISTRIBUTION

Docket File No. 40-8903 PDR/DCS BBeach, RIV RHeyer PGarcia BGarcia, RCPD, WY TMorgan NWeber LLO Branch, LLWM URFO r/f

CONCURRENCE:

RHeyer/URFO/db

PGarcia/URFO

RDSmith/URFO

DATE:

4-4-89

4/5/8

4/5/8/