

Docket File No. 40-3453
04003453110E

- 1 - JUL 28 1982

DISTRIBUTION:

Docket File 40-3453

PDR	
NRC Region IV	RAScarano
WMUR r/f	REBrowning
WMUR w/f	JBMartin
WM r/f	
NMSS r/f	
PJGarcia	
EPFisher	
HJPettengill	
JJLinehan	
DEMartin	

WMUR: PJG
Docket No. 40-3453
04003453110E

MEMORANDUM FOR: Docket File No. 40-3453

FROM: Pete J. Garcia, Jr., Project Manager
Operating Facility Section II, WMUR

SUBJECT: REVIEW OF ATLAS MINERALS' RESPONSE TO REQUEST
FOR INFORMATION - 40 CFR 190

By letter dated May 19, 1982, Atlas Minerals provided a response to a May 3, 1982 NRC information request. The information request was based on the staff review of Atlas' February 25, 1982 submittal of 40 CFR 190 data for the fourth quarter of 1981.

Discussion

Item 1 of the staff information request concerned the disparity in Ra-226 concentrations at the background air monitoring location for the third and fourth quarters of 1981. This disparity resulted in a large difference in the calculated lung dose for the nearest residence (29.81 mrem and -10.9 mrem). Atlas was asked to provide an explanation for the large difference in Ra-226 concentrations.

Atlas' May 19, 1982 response stated the opinion that the difference in Ra-226 concentrations is due to winter temperature inversions which trap the effluents from wood and coal combustion. This could explain the higher readings at the background site during the fourth quarter since Atlas also stated that wood and coal are used as a primary source of heat in the nearby town of Moab. In any case, the staff concludes that the concentrations at the background site are subject to large fluctuations due to human activity, and therefore the location of the background site should be changed.

Item 2 concerned the unbelievably low concentrations of Ra-226 in soil reported by Atlas 10^{-16} $\mu\text{Ci/g}$ compared with the LLD recommended in Regulatory Guide 4.14 of 2×10^{-7} . Atlas responded that typographical errors resulted in the values being reported as 10^{-16} , whereas all actual

40-3453/mab/82/07/20/J

20463

_____	8208060348	820728	_____	_____	_____	_____
OFC :	PDR	ADDOCK	04003453	:	:	:
	C		PDR	:	:	:
NAME :				:	:	:
DATE :				:	:	:

JUL 28 1982

values were of the order of magnitude 10^{-6} . With this explanation, the values reported by Atlas are reasonable.

Item 3 consisted of a request that Atlas provide a commitment to report concentrations of U-nat in soil in units of $\mu\text{Ci/g}$ instead of parts per million. Atlas' response provided the requested commitment.

Resolution

The staff concludes that no action is necessary regarding Items 2 and 3. However, the staff will request that Atlas propose for NRC review a new location for the background air monitoring site.

Original signed by

Pete J. Garcia, Jr., Project Manager
Operating Facility Section II
Uranium Recovery Licensing Branch
Division of Waste Management

Original signed by

Approved by:

H. J. Pettengill, Section Leader
Operating Facility Section II
Uranium Recovery Licensing Branch
Division of Waste Management

Case Completed: 04003453110E

40-3453/mab/82/07/20/0

20463

OFC	WMUR <i>PJG</i>	WMUR <i>PF</i>	WMUR <i>HJP</i>	:	:	:
NAME	PJGarcia:mb	BPFisher	HJPettengill	:	:	:
DATE	7/26/82	7/27/82	7/27/82	:	:	: