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

JUN 21 1979

WMUR-RC
Docket No. 40-8693
SUA-1336, Amendment No. 2

Docket No.: 40-8693

License: Ogle Petroleum, Inc. (OPI)

Facility: Fremont County, Wyoming

Subject: SAFETY EVALUATION REPORT: AMENDMENT REQUEST OF MARCH 22, 1979

Reviewer: R. Cooperstein, Ph.D.

Background:

OPI was issued Source Material License No. SUA-1336 on April 11, 1978. Condition No. 30 of the license states that "the licensee shall perform the radiological environmental monitoring program as outlined on page 50 of the March 1978 Supplemental Information Document to describe and document the possible influences of the operations on the environment, to assure compliance with appropriate standards and (for) early identification of possible undesirable trends." A copy of page 50 of the March 1978 Supplemental Information Document is shown as Table I.

Discussion

OPI, in its letter of March 22, 1979, requested modification of its initial environmental monitoring program commitments (Table I) as follows:

1. Air particulate monitoring being performed at 3 locations continuously be modified to monitoring for a 48-hour period on a quarterly basis for Ra-226, Th-230 and uranium.
2. Rn-222 in air monitoring at 3 locations for 1 week per quarter be modified to 48 hours per quarter.
3. Quarterly groundwater sampling upstream of the plant site, at the plant site and downstream of the plant site for uranium, Th-230 and Ra-226 analysis, be deleted from the program.

The staff's assessment of the licensee's requested changes is summarized in the following:

1. The staff concurs that continuous air particulate monitoring for an R&D study operating at a flow rate of only 25 gpm where the product is a slurry of ammonium uranyl carbonate is unwarranted and economically unjustified. The licensee's revision proposal should adequately serve to develop the desired data base for any future expanded activities.

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TABLE I

The radiological environmental monitoring program will consist of the following:

<u>Sample Type</u>	<u>Frequency</u>	<u>Analysis</u>
Air	3 locations, 1 week per quarter	Rn-222
Air particulate	3 locations, continuous	Weekly gross alpha, quarterly composite for uranium, thorium-230, radium-226, and lead-210
Environmental dosimeters	22 per quarter	Radiation dose
Surface water	2 locations, monthly when there is flow	Uranium, thorium-230, and radium-226
Groundwater	3 locations, upstream, plant site, and downstream, quarterly	Uranium, thorium-230, and radium-226
Soil	8 locations at depths 0-5 ~ 5-10 cm, and 10-15 cm, once prior to startup and every 3 years during plant operation	Uranium, thorium-230, radium-226, and lead-210
Vegetation	8 locations in 3 fractions, once prior to startup and every 3 years during plant operation	Uranium, thorium-230, radium-226, and lead-210
Gamma dose rate	22 locations, once prior to startup and every 3 years during plant operation	Radiation dose

All sample analysis for uranium, thorium-230, radium-226, and lead-210 will be performed by a competent, low-level, radiological laboratory.

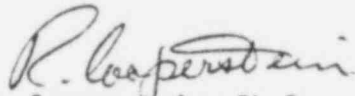
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2. The staff concurs that quarterly Rn-222 in air monitoring for 48 hours should suffice to establish the Rn-222 releases to the environment from the activity.
3. The licensee's groundwater monitoring program was derived from the NRC staff position for conventional uranium mills. This particular type of sampling is inappropriate for an R&D in situ uranium solution extraction activity. The staff concurs that such a monitoring activity should be deleted from the licensee's commitments.

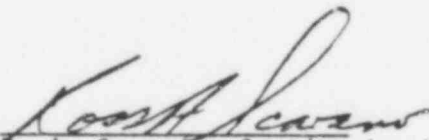
Conclusions

The staff recommends that the licensee's administrative amendment request be granted for it will not significantly decrease the degree of instituted measures to protect the health and safety of the public or the occupational personnel nor would it present a potential for insult to the environment.

The issuance of this amendment is not deemed to be a major Federal action significantly affecting the quality of the human environment. Thus, pursuant to 10 CFR Part 40 and Part 51, Section 51.5(d)4, an environmental impact statement, negative declaration, or an environmental impact appraisal need not be prepared.


R. Cooperstein, Ph.D.
Uranium Recovery Licensing Branch
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Approved


R. A. Scarano, Section Leader
Uranium Recovery Licensing Branch
Division of Waste Management

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