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FCPF:RC OFFICE OF THE SECRETARY
40-8064 D.C.
SUA-1064, Amendment No. 2

Exxon Minerals Company, U.S.A.
ATTN: Mr. G. D. Ortloff
Regulatory Affairs Manager
P. O. Box 2180
Houston, Texas 77001

Gentlemen:

Pursuant to Title 10, Code of Federal Regulations, Part 40, Source Material License No. SUA-1064 is hereby amended to authorize uranium solution mining studies at a second well field area of up to one acre, located approximately 1500 feet east of the initial test area, in accordance with the statements, representations and conditions contained in your application dated January 19, 1978 and supplement dated March 9, 1978, subject to the added conditions specified below. Accordingly, Condition 9 of License No. SUA-1064 is amended and Conditions 11 through 22 are added to read as follows:

9. For use in accordance with statements, representations and conditions contained in the licensee's application dated October 9, 1975; letter of October 26, 1977; and application dated January 19, 1978 as supplemented March 9, 1978.
11. Observation wells and monitor wells discussed on page 5 of the January 19, 1978 application shall be sampled every two weeks during mining operations and analyzed for arsenic, bicarbonate, carbonate, chloride, selenium, uranium, pH and total dissolved solids (and/or conductivity). Water levels in these wells shall also be measured at the time of sampling.
12. The upper control limit (UCL) for the bi-weekly excursion indicator parameters listed in Condition 11 shall be 20 percent above mean baseline values for each observation well and monitor well except for uranium and pH; the UCL for uranium shall be 1 mg/l above mean baseline and the UCL for pH shall be 2 units above mean baseline.

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13. When a UCL value is exceeded, the licensee shall sample and analyze the water of the affected well(s) each day and chart the data. If this condition holds or becomes aggravated for seven (7) consecutive days, corrective action shall be initiated. Written notification shall be provided to the NRC, Division of Fuel Cycle and Material Safety, and Region IV, Office of Inspection and Enforcement, within 30 days of confirming an excursion describing the condition, the corrective actions taken and the results obtained. If corrective action is ongoing at the time the report is filed, a final report shall be submitted describing end results of the corrective actions.
14. A log of events describing the corrective actions taken and a chart of all sample analyses shall be maintained during such periods to document the actions and the ensuing results.
15. The volume of barren bleed solution discharged to the tailings pond shall be measured. Monthly samples of the bleed solution (if any) shall be analyzed for uranium, radium-226, thorium-230, selenium and arsenic.
16. The uranium recovery plant for the test shall be operated at a maximum nominal flow rate of 60 gpm.
17. The licensee shall provide written notification to NRC, Division of Fuel Cycle and Material Safety, and Region IV, Office of Inspection and Enforcement, when groundwater restoration activities are initiated at the test site described in the January 19, 1978 application. The notification shall indicate the projected schedule for the restoration program. Groundwater restoration criteria shall be as described on pages 6 and 7 of the January 19, 1978 application.
18. Following completion of the restoration program, all wells used for baseline determination, as identified in the submittal of March 9, 1978, shall be sampled quarterly for a one-year period to validate that restoration has been achieved.
19. Following completion of the restoration pumping program at the original test site, selected wells in the seven-spot well field and selected observation wells (to include observation well no. 7) shall be sampled quarterly for one year, or until planned surface mining interferes, whichever comes first, to validate the restoration results.

20. The licensee is exempted from the requirements of Section 20.203 of 10 CFR Part 20 provided all entrances to the test site are conspicuously posted with the warning: "CAUTION. Any area or room within this facility may contain radioactive material."
21. A quarterly report shall be submitted that summarizes the status of the test program, with supporting analytical data and evaluations, regarding important environmental aspects of the operation such as water quality baseline data, monitor well analyses, migration control, waste generation volumes, and volumes of injected lixiviant and solution produced. The initial report should be filed following the accumulation and evaluation of baseline data.
22. The licensee shall document and maintain the results of sampling, analyses, surveys and instrument calibrations, reports on inspections and audits, employee training records, as well as any related reviews, investigations and corrective actions for a period of at least three years unless otherwise specified by Section 20.401 of 10 CFR Part 20.

All other conditions remain the same.

The added conditions were discussed and agreed to by your Mr. Freeman in a telephone conversation with Dr. Cooperstein of my staff.

FOR THE NUCLEAR REGULATORY COMMISSION



Leland C. Rouse, Chief
Fuel Processing & Fabrication Branch
Division of Fuel Cycle and
Material Safety