

## COMMISSION

## MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. ExxonMobil Corporation [Applicable Amendments: 16, 51, 52]	3. License Number SUA-1139 Amendment No. 57	
2. 3225 Gallows Road, Room 8B0607  Fairfax, Virginia 22037, Attn: Dan E. Burnham [Applicable Amendments: 16,51,52,55, 56, 57]	4. Expiration Date	Until NRC determines site Reclamation is adequate
	5. Docket No.	40-8102
	Reference No.	
6. Byproduct Source, and/or Special Nuclear Material  Uranium Byproducts	7. Chemical and/or Physical Form  Any	8. Maximum amount that Licensee May Possess at Any One Time Under This License Unlimited
9. The licensee is hereby authorized to possess byproduct materials as defined in this condition without regard to form or quantity resulting from past operations of its Highland facility. Byproduct materials are defined as tailings or other waste produced during the extraction or concentration of uranium.  [Applicable Amendment: 14]		
10. The authorized places of use are the licensee's uranium mill tailings facilities located approximately 25 miles north of Douglas, Wyoming.  [Applicable Amendments: 14, 28]		
11. For use in accordance with statements, representations, and conditions contained in the license amendment applications submitted by cover letters dated November 10, 1989, and October 8, 1991, except where revised by letters dated August 30, 1993, October 2, 1997, October 23, 2003, and August 10, 2004, and where superseded by license conditions below.  [Applicable Amendments: 10, 11, 14, 15, 16, 19, 20, 22, 28, 33, 36, 37, 40, 42, 46, 48, 51, 52, 55]		
12. DELETED by Amendment No. 14.		
13. DELETED by Amendment No. 14.		
14. DELETED by Amendment No. 19.		
15. DELETED by Amendment No. 14.		
16. DELETED by Amendment No. 19.		

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1139

Docket or Reference Number

40-8102

Amendment No. 57

17. DELETED by Amendment No. 28
18. DELETED by Amendment No. 20.
19. DELETED by Amendment No. 14
20. DELETED by Amendment No. 14.
21. DELETED by Amendment No. 14.
22. Groundwater monitoring required by this license shall be conducted in accordance with the quality assurance program specified in Chapter 4 of ExxonMobil's Highland Mine Site Procedures Manual as updated. Notwithstanding the representations in the licensee's quality assurance program, calibrations of instruments used in radiological monitoring shall be performed on a semiannual basis or in accordance with the manufacturer's recommendations, whichever is more frequent. The monitoring results shall be reported semiannually to the Chief, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, in accordance with the requirements of 10 CFR 40.65. Monitoring data shall be reported in the format shown in "Sample Format for Reporting Monitoring Data."

[Applicable Amendments: 14, 20, 46, 48, 51, 52, 55]

23. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decontamination of the mill site, reclamation of any tailings or waste disposal areas, groundwater restoration of any tailings or waste disposal areas, ground water restoration as warranted, reclamation of the tailings basin access trail, and the long-term surveillance fee.

Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criteria 9 and 10, shall be submitted to the NRC at least three months prior to the anniversary date which is designated as December 1 of each year. If the NRC has not approved a proposed revision to the surety coverage 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing surety arrangement for one year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency fee, changes in engineering plans, activities performed and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC approved reclamation/decommissioning plan or NRC approved revisions to the plan.

ExxonMobil's currently approved surety instrument, a Performance Bond issued by the Federal Insurance Company, Houston, Texas, in favor of the NRC, and a Standby Trust Agreement, between ExxonMobil Corporation and BankersTrust Company, a New York corporation, shall be continuously maintained in an amount no less than \$1,250,000 for the purposes of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

[Applicable Amendments: 14, 21, 24, 34, 35, 39, 41, 45, 46, 47, 50, 51, 53, 54]

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1139

Docket or Reference Number

40-8102

Amendment No. 57

24. The licensee shall notify the Office of the Wyoming State Historic Preservation Officer, the Wyoming State Archeologist, and the Chief, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, if any buried cultural deposits are unearthed during the disturbance of land. All work in the immediate vicinity of the deposit shall cease until approval has been granted by the appropriate State officer and the NRC.

[Applicable Amendments: 14, 20, 43, 45, 49, 51, 52]

25. In order to ensure that no disturbance of cultural resources occurs in the future, the licensee shall have an archeological and historical artifact survey of areas of its property not previously surveyed performed prior to their disturbance, including borrow areas to be used for reclamation cover. These surveys must be submitted to the Chief, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and no such disturbance shall occur until the licensee has received authorization from the NRC to proceed.

[Applicable Amendments: 14, 20, 43, 45, 49, 51, 52]

26. Before engaging in any project-related activity not previously evaluated by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates such activity may result in a significant adverse environmental impact that was not evaluated, or an impact greater than that evaluated by NRC in the environmental statement, the licensee shall provide a written evaluation of such activity and obtain prior approval of the NRC for the activity in the form of a license amendment.

[Applicable Amendment: 14]

27. DELETED by Amendment No. 14.

28. DELETED by Amendment No. 14.

29. DELETED by Amendment No. 18.

30. DELETED by Amendment No. 20.

31. DELETED by Amendment No. 19.

32. DELETED by Amendment No. 14.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1139

Docket or Reference Number

40-8102

Amendment No. 57

33. The licensee shall implement a compliance monitoring program containing the following:
- A. Sample wells 015, 112, 114, 116, 117, 120, 125, 127, 128, 129, 134, 148, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182 and 183 on a quarterly frequency for chloride, nitrate, sodium, sulfate, pH, TDS and water level, and on a semiannual frequency for arsenic, cadmium, chromium, gross alpha, lead, nickel, radium-226 and 228, selenium, thorium-230 and uranium.
  - B. Comply with the following ground-water protection standards at point of compliance well Nos. 125, 175, 176 and 177, with background being recognized in well No. 182:  
  
arsenic = 0.05 mg/l, cadmium = 0.01 mg/l, chromium = 0.05 mg/l, gross alpha = 15.0 pCi/l, lead = 0.05 mg/l, nickel = 0.02 mg/l, radium-226 and 228 = 5.0 pCi/l, selenium = 0.01 mg/l, thorium-230 = 0.55 pCi/l and uranium = 0.43 pCi/ with the exceptions of: well 125 uranium = 59pCi/l; well 175 nickel = 1.8 mg/l and radium 226 and 228 = 25 pCi/l; and well 177 uranium = 71 pCi/l.
  - C. DELETED by Amendment No. 49.
  - D. In the event the constituent limits in subsection B are exceeded, the licensee shall propose a new corrective action program with the objective of returning concentrations of those constituents to the concentration limits specified in subsection B.
- [Applicable Amendments: 12, 13, 14, 22, 23, 26, 27, 32, 43, 44, 45, 49, 51]
34. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment; reports on audits and inspections; all meetings and training courses required by this license; and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in NRC regulations, all such documentation shall be maintained for a period of at least five (5) years.
- [Applicable Amendment: 14]
35. DELETED by Amendment No. 28.
36. DELETED by Amendment No. 20.
37. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of Wyoming), which is used for the disposal of such byproduct material or is essential to ensure the long term stability of such disposal site to the United States or the State of Wyoming, at the State's option.
- [Applicable Amendment: 14]
38. Written standard operating procedures (SOPs) shall be established for ground-water monitoring, instrument calibrations, and release of equipment and materials. Release of equipment and materials shall be in accordance with Regulatory Guide 8.30, "Health Physics Surveys for Uranium Recovery Facilities," Revision 1, May 2002. An up-to-date copy of each written procedure shall be maintained on file by the SRE/RSO.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1139

Docket or Reference Number

40-8102

Amendment No. 57

All procedures shall be reviewed and approved in writing by the SRE/RSO before implementation and whenever a change in procedure is proposed. In addition, the SRE/RSO shall perform a documented review of all existing operating procedures at least annually.

[Applicable Amendment: 14, 55]

39. DELETED by Amendment No. 20.

40. DELETED by Amendment No. 55.

FOR THE NUCLEAR REGULATORY COMMISSION

Dated: 09/13/05

/RA Robert A. Nelson Acting for/

Gary S. Janosko, Chief  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards