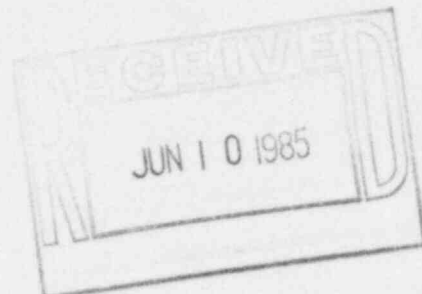




Silver King Mines, Inc.

P. O. Box 49
Edgemont, South Dakota 57735

May 31, 1985



U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Attention: Materials Licensing

RE: GWC; 135,85

Gentlemen:

We would like to make the indicated changes in our Byproduct Materials License Number 40-23111-01, to move the storage location of the sealed sources, and to reflect the current status due to employee turnover. Enclosed is our Check No. 301731 in the amount of \$60.00, to cover the cost of processing this amendment.

The primary change requested will alter the storage location of the sealed sources. The other changes are deletion of references to Paula Jean Bonner who is no longer employed by Silver King Mines, Inc., and changes to preserve the continuity of the original license application subsequent to such deletions.

REQUESTED CHANGES TO LICENSE CONDITIONS:

License Condition 12, line 6:

Please delete the name 'Paula Jean Bonner' from the text. Ms. Bonner is no longer employed by Silver King Mines, Inc.

REQUESTED CHANGES TO ITEMS LISTED IN THE APPLICATION FOR BYPRODUCT MATERIALS LICENSE 40-23111-01:

Item 6d: Attached Sheet No. 1 of the original application:

Please delete Item 6B(d): 'Paula Jean Bonner, Environmental Technician'. Ms. Bonner is no longer employed by Silver King Mines, Inc.

Item 12c: Personnel Monitoring Devices, Change Frequency:

Please change the TLD exchange frequency from monthly to quarterly.

June - 1 IV

Applicant
Check No.	301731
Amount/Fee Category	\$60.00 - 3P
Type of Fee	Amendment
Date Check Rec'd	6/17/85
Received By	ja. gurs

8508120210 850725
REG4 LIC30
40-23111-01 PDR

460667

May 31, 1984

Item 13b: Attached Sheet No. 7 of the original application:

Please replace the original 'Attached Sheet No. 7' with 'Attached Sheet No. 7/R-1', which is enclosed with this license amendment request.

The change in storage location is necessary because the building presently used for storage is scheduled for demolition this fall. We believe the proposed storage location, described in the enclosure (Attached Sheet No. 7/R-1), provides safety and security equivalent to the original location and will not increase exposure to personnel.

Item 15: Attached Sheet No. 9, Paragraph D, Item 1, of the original application:

Remove: 'and filed in a fireproof cabinet.', and

Insert: 'and filed in the Health Physics Office with a duplicate copy being filed at the Main Office'.

This change will allow all onsite Health Physics Records to be stored and maintained in the same record keeping system and will provide improved protection for the records. A revised Sheet No. 9/R-1 is attached.

Item 16:

. Attached Sheet No. 17 of the original application:

Please remove Attached Sheet No. 17. The information presented on this sheet is no longer relevant; Ms. Bonner is no longer employed by Silver King Mines, Inc.

. Attached Sheet No. 18 of the original application:

Please change 'Attached Sheet No. 18' to 'Attached Sheet No. 17/R-1'.

This change will maintain the continuity of attachment page numbering in the revised submittal.

. Attached Sheet No. 19 of the original application:

Please change 'Attached Sheet No. 19' to 'Attached Sheet No. 18/R-1'.

This change will maintain continuity of attachment page numbering in the revised submittal.

460667

May 31, 1984

Item 17:

- . Attached Sheet No. 20 of the original application:

Please change 'Attached Sheet No. 20' to read 'Attached Sheet No. 19/R-1'.

This change will maintain continuity of attachment page numbering in the revised submittal.

- . Attached Sheet No. 21 of the original application:

Please change 'Attached Sheet No. 21' to 'Attached Sheet No. 20/R-1'.

This change will maintain continuity of attachment page numbering in the revised submittal.

- . Attached Sheet No. 22 of the original application:

Please change 'Attached Sheet No. 22' to 'Attached Sheet No. 21/R-1'.

This change will maintain the continuity of attachment page numbering in the revised submittal.

- . Attached Sheet No. 22, Item No. 6 of the original application:

Please delete Item No. 6; Ms. Bonner is no longer employed by Silver King Mines, Inc.

- . Attached Sheet No. 22, Item No. 7 of the original application:

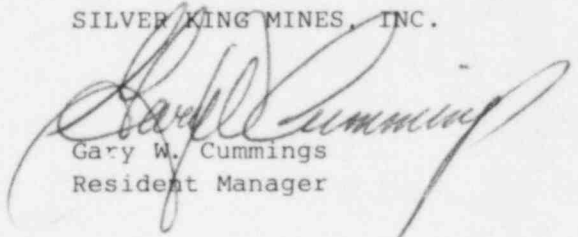
Please renumber Item No. '7' to Item No. '6'.

This change will maintain continuity of numbering on the page.

We are enclosing revised "Attached Sheets" where possible to assist you in evaluating the requested license amendment. Please call me or George Wilson at 605-552-7203 if you have any questions or require more information.

Very truly yours,

SILVER KING MINES, INC.


Gary W. Cummings
Resident Manager

GTW:dlg
Enclosures

460667

Attached Sheet No. 1

Item No. 6

Byproduct Material License Application

For: Silver King Mines, Inc.

P. O. Box 49

Edgemont, South Dakota, 57735

Telephone: 605-662-7203

INDIVIDUALS WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL

A. ONLY THE LICENSED MATERIAL SPECIFIED IN ITEM 8, LINE NO.'S 1 AND 2

- a. Keith Edwin Andersen, Chief Engineer
- b. John William Koller, Field Supervisor
- c. James Allen Miller, Surveyor
- d. Additional personnel who as a minimum have completed the manufacturer's (TROXLER ELECTRONICS) training or equivalent, been instructed in Silver King Mines, Inc. operating and emergency procedures relating to nuclear density gauges, demonstrated their knowledge in the safe use of the equipment, and are authorized in writing by the Radiation Safety Officer will be allowed to operate the equipment.

B. INDIVIDUALS WHO WILL USE OR SUPERVISE THE USE OF ANY LICENSED MATERIAL SPECIFIED IN ITEM 8

- a. George Thomas Wilson, Radiation Safety Officer
- b. Robert Dwight Sedlacek, Radiation Safety Technician
- c. Robert George Harding, Radiation Safety Technician

Attached Sheet No. 7/R-1
Byproduct Material License Application
For: Silver King Mines, Inc.
P. O. Box 49
Edgemont, South Dakota, 57735
Telephone: 605-662-7203

Item No. 13

13 b. Storage Facilities, Containers, Special Shielding

The storage facility is an upright steel storage cabinet with locking doors. The cabinet is located in the Parts Warehouse on the Mezzanine level of the Equipment Maintenance Building as indicated in Figure 1. The cabinet is firmly bolted to the wall of the building. The Resident Manager and RSO maintain control of the cabinet keys and access to the sources. All exterior doors of the Equipment Maintenance Building lock and are locked except during business hours.

The sources are stored in the shipping/storage containers identified in Item No. 9. Special shielding is not used. Rooms on the Mezzanine level, excluding the Parts Warehouse, are occupied approximately 96 man-hours per week. The Parts Warehouse is occupied less than 15 man-hours per week.

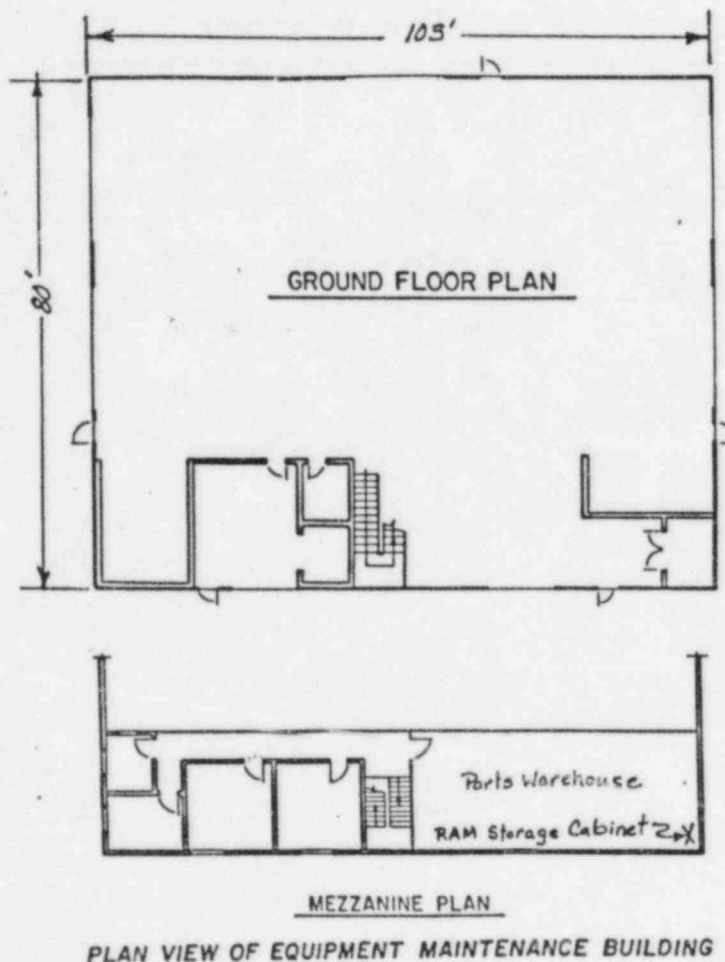


Figure 1

460667

Byproduct Material License Application

For: Silver King Mines, Inc.

P. O. Box 49

Edgemont, South Dakota, 57735

Telephone: 605-662-7203

5. Keep all unauthorized persons out of the operating area. Unauthorized persons should be no closer than 5 meters (15 feet). The general public must not be unnecessarily exposed to radiation.
6. At all times the gauge's and sources shall be secured against unauthorized removal. If stolen, they could be abandoned under conditions which could be hazardous.
7. Insure that the gauge has had leak tests performed at the intervals required by the Radioactive Materials License.
8. If there are any doubts about use of the instrument, ASK. The Radiation Safety Officer either knows the answer or will obtain one.

B. SECURITY

Locks shall be maintained on the equipment to prevent accidental exposure of the sealed source when not under the direct supervision of authorized personnel. In addition, storage containers shall be physically secured to prevent tampering or removal by unauthorized personnel.

C. PERSONNEL MONITORING

If personnel monitoring is required, no person shall use equipment unless he is in possession of the appropriate form of dosimetry. Equipment or sources specified in Item 8, Line No.'s 1, 2 and 3, require the use of dosimeters.

D. RECORDS AND REPORTS

1. A biannual physical inventory to account for all sealed sources received and possessed under the license shall be performed. The inventory record shall be maintained for inspection, and filed in the Health Physics Office with a duplicate copy being filed at the main office.
2. All sealed sources shall be leak tested at the interval required by the license. When transferred, in the absence of a leak test certificate, the source shall not be put into use until so tested.
3. Reports from the dosimetry service shall be maintained on file for inspection.
4. When an employee terminates employment, a record of the total received dose shall be made available to the individual on request.

Attached Sheet No. 17/R-1

Item No. 16 (continued)

Byproduct Material License Application

For: Silver King Mines, Inc.

P. O. Box 49

Edgemont, South Dakota, 57735

Telephone: 605-662-7203

7. George Thomas Wilson, Radiation Safety Officer

Training:

Nov. 4-5, 1982: Applied Health Physics

Presented by: Oak Ridge Associated Universities. A copy of the course outline is attached (Appendix E).

Dec. 3, 1980: Training course for use of Nuclear Testing Equipment presented by TROXLER ELECTRONIC LABORATORIES, INC.

A. Radiologic Safety

1. Principals and Practices of Radiation Protection
2. Leak Testing Procedures
3. Mathematics and Calculations Basic to the Use and Measurement of Radioactivity
4. Biological Effects of Radiation
5. Radioactive Measurement Standardization and Monitoring Techniques and Instruments
6. Accident and Incident Procedures
7. Procedures for Nuclear Gauge Storage and Transportation
8. General Safety Precautions

B. Gauge Operation

1. Instrument Theory
2. Operating Procedures
3. Maintenance
4. Field Application
5. Gauge Calibration

460667

Attached Sheet No. 18/R-1

Item No. 16 (continued)

Byproduct Material License Application

For: Silver King Mines, Inc.

P. O. Box 49

Edgemont, South Dakota, 57735

Telephone: 605-662-7203

1980: "Radiation Monitoring and Control Related To Uranium Mining and Milling", an 18 hour course presented by the United States Department of Labor, Mine Safety and Health Administration. A course outline is attached (Appendix B).

Attached Sheet No. 19/R-1
Byproduct Material License Application
For: Silver King Mines, Inc.
P. O. Box 49
Edgemont, South Dakota, 57735
Telephone: 605-662-7203

Item No. 17

EXPERIENCE

1. Keith Edwin Andersen

1976 to the Present: Silver King Mines, Inc., Edgemont, South Dakota, Chief Engineer

Mr. Andersen has held the position of Chief Engineer since 1978, and has been in charge of the Engineer Department at the Edgemont Uranium Mill, owned by TVA. His experience is in construction engineering, surveying and uranium exploration field work.

2. John William Koller

1978 to the Present: Silver King Mines, Inc., Edgemont, South Dakota, Field Supervisor

Mr. Koller has worked in the Engineering Department at the Edgemont Uranium Mill, owned by Tennessee Valley Authority, for five years. Primarily experienced in surveying and exploration field work.

3. James Allen Miller

1978 to the Present: Silver King Mines, Inc., Edgemont, South Dakota, Surveyor

Mr. Miller has worked in the Engineering Department at the Edgemont Uranium Mill, owned by TVA, for five years. His experience is primarily in surveying and exploration field work.

4. Robert Dwight Sedlacek, Radiation Safety Technician

1976 to the Present: Silver King Mines, Inc., employed at the Edgemont Uranium Mill.

Since 1978 Mr. Sedlacek has worked in the Mill Laboratory. His primary responsibilities are:

Environmental Sampling (radiologic and non-radiologic)
Collection of in plant area, air and water samples
Fluorometric analyses for Uranium in area air samples and ore samples.

460667

Attached Sheet No. 20/R-1
Byproduct Material License Application
For: Silver King Mines, Inc.
P. O. Box 49
Edgemont, South Dakota, 57735
Telephone: 605-662-7203

Item No. 17 (continued)

Mr. Sedlacek is also experienced in the use of all the radiation detection equipment available on site, and regular uses exempt quantities of byproduct material in the form of calibration check sources.

From 1976 to 1978, Mr. Sedlacek worked as a laborer on a Uranium Exploration drill rig.

5. Robert George Harding, Radiation Safety Technician

1977 to the Present: Silver King Mines, Inc., employed at the Edgemont Uranium Mill.

Radiation Safety Technician, November 1983 to present. Mr. Harding assists with the environmental radiation monitoring, conducts routine inplant area air sampling for airborne contaminants and conducts gamma radiation surveys. Runs laboratory analysis of in plant samples and other sampling duties as required.

Mr. Harding is familiar with all the radiation detection equipment available on site, and has the day to day responsibility for the instrument quality assurance program. Mr. Harding regularly uses exempt quantities of C3-137, Th-230, Tc99 in the form of calibration check sources.

Draftsman, 1978 to 1982.

Laboratory Technician, 1977 to 1978

Mr. Harding collected in plant area air samples and analyzed them fluorometrically for Natural Uranium. He was also responsible for the environmental sampling program being conducted at that time.

1974 to 1977 - Non-Radiologic work.

1973 - 1974 - Susquehanna Western, Inc., Edgemont, South Dakota,
Laboratory Technician

Primary responsibilities involved mill process sampling and assay on the total milling operation. Primary processing was for uranium and vanadium.

Attached Sheet No. 21/R-1

Item No. 17 (continued)

Byproduct Material License Application

For: Silver King Mines, Inc.

P. O. Box 49

Edgemont, South Dakota, 57735

Telephone: 605-662-7203

6. George Thomas Wilson

1979 to Date: Silver King Mines, Inc., Edgemont, South Dakota

May 1981 to the Present: Project Engineer, Radiation Safety Officer

Mr. Wilson's responsibilities include:

Supervision of Environmental Monitoring and Radiological Monitoring Programs established by TVA. Develop and establish a radiation safety program, and health and safety programs for the Mill Decommissioning Project. Evaluation of environmental, and radiological aspects of mine, mill and other plant facility design and construction plans and programs. Perform and supervise radiation surveys and health physics monitoring. His primary experience dealing with byproduct material, other than with exempt quantity sources, was obtained during training at Oak Ridge Associated University.

Project Engineer: May 1980 - May 1981

Mr. Wilson's primary responsibilities were in preliminary planning and conceptual design of the tailings disposal area, proposed new mill site and tailings impoundment area. Assisted the Environmental Engineer on environmental radiologic surveys.

460667