

# ShawPittman

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July 13, 1999

Mr. Craig Gordon  
U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406

Dear Craig:

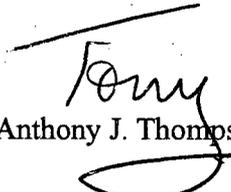
Enclosed is a revised Standby Trust Agreement and a revised draft Project Plan for Heritage Minerals Inc.'s (HMI) decommissioning and decontamination (D&D) program.

HMI continues to actively pursue D&D options but naturally is anxious to have its program "grandfathered" before August 20, 1999. Should you have any questions please do not hesitate to call as time is of the essence.

In closing, I note that HMI has done some analyses of the potential impact of the HMI/ASARCO mining and milling activities on local groundwater. Those analyses, which will be provided to NRC with the results of the Final Status Survey Plan (FSSP) for license termination, demonstrate that there have been no adverse impacts on groundwater at the HMI site. It would also note that the proposed clean up of the monazite pile and decontamination of the mill will pose no threat to local wildlife and similarly, there is no potential risk to aquatic life from such activities, particularly compared with the active mining and milling activities of the past.

With all best wishes.

Sincerely,

  
Anthony J. Thompson

JUL 14 1999

**B-44**

Washington, DC  
New York  
London

## **Heritage Minerals Inc.'s (HMI's) Plan for the Decommissioning and Decontamination (D&D) of the Site Subject to NRC License #SMB-1541**

### **Project Management**

The contractor selected to perform the decommissioning will be licensed to utilize any licensable equipment by the U.S. Nuclear Regulatory Commission (NRC) and qualified by experience to manage a project of this scope. The following list of activities as prescribed in NUREG-5849 will be used as a planning guide.

- Terminate the possession and storage of radioactive material.
- Remove radioactive material from the facility.
- Properly dispose of any radioactive material.
- Submit an NRC Form 313 "Disposition of Radioactive Materials."
- Conduct Final Site Survey.
- Submit report to the NRC.
- NRC License Termination.

### **Site Mobilization**

- An unaffected building will be used to establish alpha background activity for concrete and metal substrates which comprise the construction of the affected buildings on site.
- Environmental dosimeters will be placed at locations around the site prior to any D&D work, particularly near the monazite pile, work areas and background locations. Similarly, prior to any D&D work, dosimeters will be evaluated and, if necessary, calibrated, and at the completion of D&D activities collected and evaluated again. An air sampling unit will be set up near and downwind of the monazite pile. A baseline air sample will be obtained prior to any D&D work. The environmental monitoring is intended to evaluate potential doses to workers and members of the public due to the D&D process.
- Prior to any D&D work on site, both of the mill buildings will be closed to the maximum extent practical to prevent intruder penetrations and/or inadvertent contamination by wind or water forces.

- A secure, fenced-in exclusion area near the existing pile will be set up for the staging of shipping containers filled with monazite ore and any equipment that cannot be released and has been removed from the site buildings. The enclosure will have a gate access that will be locked when the area is unattended, maintaining the security of licensed material per 10 CFR Part 20.
- A site specific Health and Safety Plan (HASP) will be prepared prior to commencement of any D&D work.

### **(1) Removal of the Monazite Pile**

- Monazite ore will be placed into a hopper via a front end loader which will transfer it into a shipping container. Since the monazite pile was deposited on natural soils, the depth of the "first cut" will be determined by the color differential between the dark monazite ore and lightly colored underlying sands. The equipment used to remove the pile will be directed to keep the wheels on "clean" ground during the excavation. Monazite ore will be recovered from any metal drums and packaged as above. Empty drums will be surveyed for release using the criteria that have been established in the Final Status Survey Plan (FSSP). Once the pile has been cleared and packaged, further clean-up will be guided by scanning the area with a shielded NaI crystal to achieve no more than twice-background levels. Workers in this phase of the project will have the required DOT "hazmat" shipper training.
- Twice each day as required by environmental conditions and prior to excavation work, the pile will be sprayed with water to reduce the potential for airborne particulates. Equipment operators and workers in the immediate area will wear respiratory protection until the site supervisor has determined that the occupational limits on airborne activity in 10 CFR 20 are not exceeded. Provided these limits are not exceeded, dust masks will be used for the duration of the work.
- All personnel on site will be badged for evaluation of cumulative exposure during the project.
- At the end of each day, equipment used to transfer the monazite will be located within the exclusion area. A thorough survey of the equipment used to transfer the monazite will be made at the end of the packaging process and will be cleaned as necessary and released after the process has been completed.

### **(2) Survey and Sample Outdoor Affected and Unaffected Areas**

- A 10m by 10m grid will be established and referenced to a permanent landmark. As described in the FSSP each grid will be surveyed and soil samples obtained as required by

the plan. Samples will be sealed with completed chain of custody forms and sent to an NRC licensed laboratory for analysis. Samples will be processed and sealed in counting containers for at least 3 weeks prior to counting to allow secular equilibrium to be achieved. No grading or back-filling will be conducted until after NRC confirmation of the sampling results.

### **(3) Final Status Survey**

- With survey instruments under proper quality control (see FSSP), the final release survey will be initiated at the highest elevation of equipment and proceed downward to ground level. Completed survey units and individual sample locations will be clearly marked for easy replication. The wipe samples for removable radioactivity will be obtained first. Then the area will be wiped clean with a damp cloth and allowed to dry to remove any dust or film that would shield a alpha emitting isotope fixed to the surface of the equipment. The fixed component of any residual radioactivity will then be measured.
- If equipment is discovered which can not be released, an attempt will be made to clean it in place using a HEPA filtered vacuum unit. Suitable PPE and dust masks will be worn during any vacuuming operations. Any item with fixed activity will be dismantled and each piece brought to an area designated for further cleaning on the ground level. Inside a temporary enclosure with HEPA filtered ventilation, various cleaning techniques will be attempted. Equipment which cannot be cleaned to below the release limits in the FSSP after several attempts will be packaged in B-25 boxes and placed in the fenced exclusion area. All such material will be disposed of in a licensed facility.
- Once all designated equipment survey units have been surveyed and any items which can not be released removed, the building survey will be conducted. Walls up to two meters and then floors will be surveyed according to the FSSP. At the completion of the survey, the building will be closed and secured to the extent possible. The temporary lighting will be left in place for any confirmatory surveys.

### **(4) Final Report**

- All field logs, QC charts, and raw data will be reviewed as part of the data validation process. The QA parameters as discussed in the FSSP will be evaluated. Approved data will be used in the statistical data reduction process specified in the FSSP. Survey diagrams will be reviewed and the sample location verified. The final report will provide a discussion of the methods used onsite, a summation of the data, and a statement on the suitability of the site for unrestricted release. Appendices will include raw data, personnel/environmental monitoring data, shipping manifest, QC/field logs, and any other information necessary for a thorough review.