

The following table presents the chronology regarding the D&D activities performed at Heritage Minerals Inc.

DATE	COMMUNICATION TYPE / ADAMS ML#	SUMMARY
2/21/89	NRC to HMI ADAMS ML010870128	Inspection report and NOV - first inspection identifying Source Material at the site. During the inspection, samples were taken of feed stock, process material, and waste product. Two of the six samples taken identified source material. The two samples were: 1) one of material moving from the Wet Mill to the Dry Mill and 2) one of the nonconductive waste stream from the Dry Mill.
7/25/90	HMI to NRC ADAMS ML030370324	Response to RAI from license application: States that "upon decommissioning, plant areas where material containing source material has been present will be decontaminated by rinsing with water until required decontamination levels are reached. Any source material collected during this decontamination process will be added to the monazite pile for future transferral. The monazite pile will be considered a restricted area in accordance with the requirements of 10 CFR 20. Upon decommissioning, the monazite pile will be removed entirely and transferred to another party so that source material is no longer present at the site." Note that at this point, the monazite pile contains approximately 1000 tons of material.
8/23/90	HMI to NRC ADAMS ML030370350	Notice of cessation of activities and proposed decon efforts. The letter states that the plant will be placed on standby status pending improvement in market conditions. The letter also states that the licensee is taking "the necessary steps to begin decontaminating the plants and equipment. The wet mill and structural steel will be washed down with water and the electrical equipment and the structural steel in the dry mill will be dry decontaminated. Any source material collected during the clean up will be combined with the stockpiled monazite for future disposal."

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9/27/90	HMI to NRC ADAMS ML052000394	Notice of cessation of activities and proposed decon efforts. More detail than August letter and also has proposed licensing basis. The letter proposes 4 alternatives for disposal of the licensed material: 1) transfer to another licensee for processing, 2) disposal at sea, 3) on-site burial, and 4) disposal at a licensed waste facility. This letter also states that the plant and any other areas where source material is present will be deconned. It states that other areas at the site where elevated concentrations of thorium and uranium exist, but not at levels subject to NRC jurisdiction, will be addressed with the appropriate state agency.
10/6/90	HMI to NRC ADAMS ML030370460	transmits gamma surveys of tailings areas
2/28/91	HMI to NRC ADAMS Archive 9306220364	This letter informs the NRC that Heritage has stockpiled 695 cubic yards of source material. The letter includes a request to dispose of this material by mixing it with the other sands on site, essentially returning the material to the areas from where it came.
5/22/91	NRC to HMI ADAMS ML010870146	Inspection Results - states that disposal request is under review. Also states that Wet and Dry Mills have been deconned, and that 10 wipes obtained by the inspector did not identify any loose contamination, but that more surveys will be required when the monazite pile is removed.
4/23/92	NRC to HMI ADAMS Archive 9205130058	Letter informing HMI that they have been placed on the Site Decommissioning Management Plan
8/30/94	HMI to NRC	Transmits D&D cost estimate and discusses export of monazite to a company in Malaysia.
10/7/94	HMI to NRC ML052100380	Requests that NRC suspend consideration of onsite disposal of monazite, because they are pursuing sending the material to a processing company in Malaysia.
10/27/94	NRC to HMI ADAMS ML052100388	Summary of 8/2/94 meeting that was held to discuss decommissioning efforts. At the meeting, HMI agreed to provide a D&D plan for the site.
11/03/94	NRC to HMI ADAMS ML052100393	Letter confirming NRC's understanding that HMI no longer wants to pursue onsite disposal of material (based on a letter from HMI dated 10/7/94). The letter notifies HMI that their request from 2/28/91 is withdrawn.

11/20/95	NRC to HMI ADAMS ML010870167	Inspection Report- inventory of licensed material had not changed. The drums of source material from the dry mill decon had been placed in the stockpile area for storage, so that all licensed material was together.
10/2/96	NRC to HMI ADAMS Archive 9610160002	Inspection Report - states that the stockpiled monazite sand was covered with a filter cloth, and was inside a locked and posted stockade fence. No other noted changes to facility. The inspector noted that HMI said they had received verbal approval from NJDEP on Mill Tailings Remediation Action Plan (MTRAP), which is the plan to address the non-NRC licensed thorium and uranium on site. The plan included performance of a characterization survey of these areas and the determination of a site remediation method. The inspector asked HMI for a copy of the MTRAP when complete.
11/8/96	NRC to HMI ADAMS Archive 9611150283	Documentation of meeting held on 10/10/96, when the need for HMI to initiate Decommissioning was discussed. The letter requests a decommissioning schedule and cost estimate.
12/30/96	HMI to NRC	Response to 11/8/96 letter. Includes a proposed D&D plan and schedule for export of monazite pile to a processing plant in Malaysia.
4/18/97	NRC to HMI ADAMS ML052000371	Documentation of meeting held on 4/10/97 to discuss final status survey plans and review decommissioning schedule from 12/30/96 letter. By this time, HMI had applied for an export license. The letter also documented an additional request for a copy of the MTRAP and the Final Status Survey Plan.
5/9/97	HMI to NRC ADAMS ML052000375	Transmittal of MTRAP

11/3/97	HMI to NRC ADAMS ML051960549	<p>Submittal of Final Status Survey Plan (Decommissioning Plan). The plan states that the data on the previously-performed deconning of the plant was not sufficient to meet regulatory requirements. The Decommissioning Plan separates the site into affected and unaffected areas:</p> <p>The affected indoor areas will receive a 100% surface area scan and each unit will have 30 integrated measurements and 30 corresponding wipe tests.</p> <p>Unaffected indoor areas will receive a 10% scan, and the same number of wipe and fixed samples. If any measurement is greater than 25% of the release limit, the entire survey unit will be considered affected.</p> <p>The outdoor affected areas will receive a 100% scan and soil samples will be collected at a rate of one per 100 square meter grid.</p> <p>Outdoor unaffected areas will receive a 10% scan, 30 soil samples will be taken around the mills. If any soil sample exceeds 75% of the release limit, the entire survey unit will be considered affected and resurveyed.</p> <p>Decon of buildings and equipments was expected to be accomplished through brushing and vacuuming. The monazite pile would be loaded into shipping containers.</p>
8/31/98	NRC to HMI	Inspection Report- little activity at the site since the last inspection. HMI was notified of the Timeliness Rule and was asked to submit a revised decommissioning schedule to meet the rule.
11/30/98	HMI to NRC ADAMS ML052010554	Provides responses to NRC and NJDEP questions on the DP and transmits a revised decommissioning schedule (as requested in the 8/31/98 inspection). HMI indicates that politics in Malaysia has slowed the export of the material, but expected a definitive answer from the company there soon. This letter also has data from initial decon in 1990.
2/1/99	NRC to HMI	Inspection Report - little change from past inspection. Appeared to be some progress toward export of the material to Malaysia.
2/6/99	NRC to HMI	acceptance of D&D schedule
3/16/99	NRC to HMI ADAMS Archive 9904080005	Acceptance of DP and explanation of SDMP

6/24/99	HMI to NRC ADAMS ML052000360	answers to questions on the DP - explains why HMI had designated 3 equipment survey areas as "unaffected" , which the NRC had questioned.
7/13/99	HMI to NRC ADAMS ML052000360	revised Project Plan for D&D activities.
8/13/99	HMI to NRC ADAMS ML052000360	Statement that equipment previously deconned will be rechecked and not removed or disposed until it satisfies decommissioning limits.
8/17/99	HMI to NRC ADAMS ML0520003600	Transmits answers to NRC questions on DP - these questions were process questions only (e.. type of dosimetry to be worn, organizational relationships, etc.).
9/7/99	NRC to HMI ADAMS ML052000360	Notice that the 11/3/97 DP plus the letters dated 11/30/98, 6/24/99, 7/13/99, & 8/17/99 will make up the DP.
10/19/99	NRC to HMI ADAMS ML003721778	Transmits EA and FONSI related to license amendment for DP. Notifies HMI that no hearing requests had been received, so remediation activities could begin.
8/16/00	NRC to HMI ADAMS ML003744241	Inspection Report - no changes from last inspection. HMI was reviewing proposals from various decommissioning contractors and was trying to pick one to hire.
10/24/00	HMI to NRC	Response to NRC letter dated 9/20/00 which requested a schedule for contractor selection and D&D activities. States that they are in the final stages of selection. Also states that they are awaiting proposals from IUC for transfer of waste to them. (Note that the transfer to Malaysia fell through)
12/29/00	NRC to IUC	Transmittal of license amendment approving acceptance of HMI material to use as feed material.
3/23/01	NRC to HMI	Summary of meeting held to discuss site remediation. HMI stated they still had not settled on a contractor, but expected to within several weeks.
6/7/01	HMI to NRC ML012640195	Notification to NRC that decommissioning activities are commencing.
11/25/01	HMI to NRC ADAMS ML021150357	Submission of Final Status Survey performed by RSI

2/14/02	NRC to HMI ADAMS ML020590397	Communication of results of first ORISE survey. Notice that additional remediation is necessary.
3/26/02	HMI to NRC	Response to NRC letter from 2/14/02. Discussion of proposed actions following the discovery of additional source material following first ORISE survey. Provides notice that HMI will perform Characterization and prepare a process history and look into demolishing mill buildings.
4/10/02	ORISE to NRC ADAMS ML021060589	Confirmatory Survey of HMI from 12/10 - 12/13 2001.
6/20/02	HMI to NRC ADAMS ML022030215	Submittal of RSI analysis of ORISE beta over-counting.
8/5/02	HMI to NRC ADAMS ML022210011	Communication of proposed sampling protocol to identify additional licensable material for remediation.
11/22/02	NRC to HMI ADAMS ML023310240	Communicates results of TAR to evaluate ORISE beta measurement techniques. The TAR supports ORISE methods.
12/20/02	HMI to NRC ADAMS ML030090197	Forwards Characterization Survey performed by RSI
12/23/02	NRC to HMI ADAMS ML023570327	Inspection Report. Describes HMI decommissioning activities and shipment of the monazite pile. Transmits results of ORISE confirmatory survey and cites apparent violation of Timeliness Rule.
3/10/03	HMI to NRC ADAMS ML030830547	proposal from SENES on D&D activities
5/6/03	HMI to NRC ADAMS ML031320537	Modified plan for final D&D Activities
6/26/03	HMI to NRC ADAMS ML031960118	Sample results from removal of soil pockets in April, 2003.
7/10/03	HMI to NRC ADAMS ML031980464	Transmittal of follow up items from 7/8/03 meeting: soil sample data from Enercon

12/11/03	ORISE to NRC ADAMS ML040250070	Transmittal of Phase 2 Confirmatory Survey
1/8/04	NRC to HMI ADAMS ML040130730	Inspection Report
6/30/04	HMI to NRC ADAMS ML041910222	Update on D&D activities and proposed activities to complete D&D. Forwards SENES Pathways Analysis
11/17/04	NRC to HMI ADAMS ML043240049	Response to 6/30/04 Letter. Agrees with D&D Activities except for stockpiled material. Requires HMI to dispose of stockpiled material as licensed material.
8/30/04	DWM to RI/DNMS ADAMS ML042320200	Response to TAR from 6/30/04 letter
2/14/05	ORISE to NRC ADAMS ML050960038	Results of NRC split samples
3/4/05	HMI to NRC ADAMS ML051010170	License Termination Request with numerous survey results