

## State of New Jersey Department of Environmental Protection

LISA P. JACKSON Commissioner

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May 25, 2006

Marie Miller, Chief Decommissioning Branch Division of Nuclear Materials Safety US Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406-1415

Dear Ms. Miller:

Thank you for coming to our office on May 17, 2006 to discuss the Commission paper regarding the Heritage Minerals site and giving us the opportunity to comment on the draft Environmental Assessment (EA). As we discussed at the meeting, we believe that, based on review of our historical records, the description of the operating history in the EA is not completely accurate.

The draft EA implies that monazite was not produced until 1989, however, the US Nuclear Regulatory Commission (NRC) Inspection report dated February 24, 1989, indicates that monazite was separated in the dry mill following magnetic separation and collected in a hopper where it was then combined with the wet mill tailings since 1986. The separated monazite was recombined with wet mill tailings and pumped to the combined tailings pile. Perkins and Cole, attorneys retained by Heritage Minerals, in their September 27, 1990 letter to the NRC, stated that "...monazite waste at source material concentrations was re-combined with other materials and placed in the area marked in blue on the site map [the combined tailings pile]..." As documented in the NRC Inspection Report Number 99990001/89-001, the current process (1989) used "new feed" which were the dry mill tailings from ASARCO. The inspection report states that this was *the same process that had been in operation since 1986*. Samples taken by the NRC inspector showed the monazite fraction, before it was combined with the wet mill tailings, had a source material concentration of 0.585%.

It is not clear in the Site Operating History of the EA that Heritage had been producing monazite since 1986 and combining it with wet mill tailings, which were then placed in the combined tailings pile. If we examine the NRC's justification for claiming jurisdiction over the ferrovanadium slag on Shieldalloy Metallurgical Corporation's (SMC) Newfield site, there appears to be a glaring contradiction.

JON S. CORZINE Governor

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The NRC states, in a January 15, 1992 letter to Dr. Robert Stern of the Department of Environmental Protection, that "The NRC jurisdiction is exercised for the protection of the workers on site even though some of the radiation exposure so regulated involves radiation from unlicensed material or devices. Thus, the ferrovanadium slag [which itself did not contain licensable source material] on SMC's Newfield site comes under NRC jurisdiction to the extent that the slag represents a source of radiation exposure to be considered in the protection of the workers while the slag is on the site." So at the Heritage site, even though licensable quantities of source material (which were determined to need a license by the NRC and for which Heritage Minerals received a Notice of Violation), contaminated large areas of the Heritage site, in this case the NRC claims no responsibility.

The January 15, 1992 letter goes on to state that "The NRC's authority at a licensed site ... also extends to facilities, material and equipment contaminated with the licensed material, and that authority is exercised to the extent necessary for adequate protection of the workers, the public and the environment." But at the Heritage site, areas that were contaminated with licensable material are deemed outside of NRC's jurisdiction because they are not themselves above source material concentration.

The Department still believes that the NRC jurisdiction should extend not only to the area where licensable pockets of material were found, but to the combined tailings pile as well. This was not adequately addressed in the EA.

Under the Site Licensing section (page 4), the EA states that "The complexity of this site, where NRC-regulated material and potentially-state-regulated material are in such close proximity (and layered over each other in some locations), prompted NRC to add the Heritage site to its Site Decommissioning Management Plan in April, 1992." Later, under the Site Decommissioning section (page 7), the EA states that "The NRC inspectors then performed a gamma walkover survey of the area encompassed by the boundary identified in the June 30, 2004 letter." If potentially-state-regulated material is layered over NRC-regulated material, then a gamma walkover survey may miss NRC-regulated material remaining at depth. Please explain how the NRC can ensure that licensable material is not at depth.

Thank you for giving us the opportunity to clarify our position so that it can be stated correctly in the EA and in the Commission paper.

Sincerely,

Patricia Gardner, Manager Bureau of Environmental Radiation

c: Director Lipoti, DESH, DEP Assistant Director Baldauf, RPP Marjorie McLaughlin, NRC Jenny Goodman, BER