Heritage Minerals Fact Sheet

Item 3

In its letter dated June 15, 2006, the NJDEP states that NRC has been inconsistent in applying its jurisdiction over the Shieldalloy and Heritage Minerals (HMI) sites.

At HMI, the NRC determined that it's regulatory authority does not extend to material that contains < 0.05% source material concentration. Such material is located within the combined tailings pile areas (i.e., the "Blue Area" and the "Gray Area") and also is located within the plant area (i.e. the "Red Area") in between the three, non-contiguous portions of the site that the NRC specifically licensed. The material located in the Gray Area resulted from the earliest minerals processing, and consisted of a combination of all plant tailings, each with source material concentration < 0.05% by weight. The Gray Area material was reprocessed for its remaining saleable mineral content beginning in 1986. The material located in the Blue Area originally consisted of a combination of plant waste tailings resulting from the reprocessing of the Gray Area material, including one waste stream with source material concentration > 0.05% by weight. However, all waste streams were immediately combined in the plant process and were piped as one stream to the Blue Area. The combined stream contained < 0.05% source material. The material placed in the Blue Area was later (1990) processed by HMI, and the waste stream containing > 0.05%, by weight source material concentration was removed and staged separately in the NRC-licensed Source Material Storage Area (called the "Monazite Pile"). NRC jurisdiction only extended to the segregated material containing > 0.05% by weight source material concentration. This determination was supported by the November 30, 1990 (ADAMS ML030370215) and December 10, 1991(ADAMS ML030370169) OGC reviews.

Based on the OGC determinations, NRC issued to HMI a license that specifically defined the site (i.e. the NRC-licensed site) as those areas that had been impacted by the segregated material containing source material concentration > 0.05% by weight. The defined site at Heritage, as described on its NRC license, has always been the Wet Mill (after the stage at which material > 0.05% source material concentration was segregated), the Dry Mill, and the Source Material storage area and its contents.

At Shieldalloy, the processing operations involved bringing onto the site ferrocolumbium ore that contained > 0.05% by weight concentration of source material. This is in contrast to the HMI site, where the feed material originated on site and contained < 0.05% by weight source material concentration. The NRC licensed the Shieldalloy incoming material, and the entire facility, which consisted of manufacturing and storage areas. One NRC-licensed storage area was used to store slags resulting from both the ferrocolumbium and the ferrovanadium operations. While the slag from the ferrovanadium operations contained source material concentration <0.05% by weight, it was staged in a land area that was part of the Shieldalloy NRC license. Similarly, any State-regulated material within the NRC-licensed HMI site was under NRC jurisdiction. Remediation of the NRC-licensed site at HMI included remediation of all radiation sources (licensed and unlicensed). The staff dose assessment of the NRC-licensed HMI site also considered the dose impact from any residual contamination (licensed and unlicensed).

Item 4

In its letter dated June 15, 2006, the NJDEP states that it is doubtful that HMI will agree to clean up an area that has been released by the NRC for unrestricted use. The State is implying that HMI will not remediate the NRC-licensed site areas to the State cleanup levels. The staff considers this to be an unlikely prospect. HMI has stated to the staff both in person and in written correspondence, that it intends to remediate the site to the State cleanup levels.

In a letter dated November 22, 2002, HMI states that "any residual monazite concentrations remaining onsite that are below NRC licensable levels will be addressed with the State of New Jersey's Department of Environmental Protection. . . along with all other areas of the HMI site which contain slightly elevated levels of radionuclides resulting from mineral recovery operations (ADAMS ML051990142)." In a letter dated March 10, 2003, HMI states that ,"In any event, given that HMI intends to develop the site, soil contamination in all of the areas "affected" by site mineral processing operations will have to meet New Jersey Department of Environmental Protection ("NJDEP") standards in N.J.A.C. 7:28-12.1 entitled Remediation Standards for Radioactive Materials so that adequate regulatory oversight necessary to protect public health and safety will be assured (ADAMS ML030830547)."

HMI has been under an Administrative Consent Order (ACO) with the State of New Jersey since November of 1993, by which," The Department intends and Respondents agree that the scope of the investigation and cleanup required by this Administrative Consent Order will include all contaminants at the above referenced Site, and all contaminants which are emanating from or which have emanated from the Site (referenced in a letter dated June 30, 2004,ADAMS ML041910222)."

In a letter dated June 30, 2004, HMI states, "Since HMI currently is bound by the above-noted ACO to investigate and clean up all contaminants at the site, including radionuclides, which will require it to satisfy New Jersey's 15 mrem/year standard to release the property for unrestricted use, including the planned construction of residential dwellings at the site, or perhaps other uses under a restricted release scenario, the proposed disposition pathway will have the same effect as approving removal to a State-permitted disposal facility. In addition, HMI is prepared to submit a written commitment to NRC that it will satisfy New Jersey's site release standards. (Emphasis added) (ADAMS ML041910222)."

In Attachment D to this letter, HMI provided to NRC its 2003 proposal for remediating the remainder of the site. HMI informed NRC that it has provided this plan to NJDEP for its review and approval. During a meeting with NJDEP on May 17, 2006, NRC asked NJDEP representatives if this plan has been received. NJDEP stated to NRC that it has, and that it is under review. The plan describes the remediation of the entire mined portion of the HMI site (i.e. the entire 287 acres), and does not indicate that the NRC-licensed site areas will not be remediated.

Finally, the NRC-licensed HMI site consists of three non-contiguous areas totaling approximately one acre. HMI's plan, submitted to NJDEP, for remediating the entire 287-acre affected site involves large-scale soil mixing. With the amount of soil involved in this process, it is unlikely that HMI could purposefully bypass the NRC-licensed site.