

Heritage Minerals Inspection No. 04008980/2004001 Exit

This exit will formally close an NRC inspection of the Heritage Minerals site in Manchester Township, New Jersey. The inspection covers the period from November 29, 2004 to December 30, 2005, and involved review of the following areas:

- 1) Decommissioning and remediation of outdoor areas
- 2) Transportation of contaminated soil
- 3) Review of your Final Status survey and request for license termination

Within the scope of the inspection, we identified no violations. We also determined that you have completed all decommissioning activities described in your approved Decommissioning Plan. This Inspection Report also includes the final NRC staff dose assessment of the licensed portions of the Heritage site as well as the NRC responses to the comments you provided on the draft Dose assessment.

I will briefly discuss the observations and conclusions for each inspection area, and will then summarize the responses to your dose assessment comments. We can then discuss the current status of the NRC's consideration of your request for license termination, and answer any questions you may have.

1) Under the first inspection area, Craig Gordon and I observed excavation activities of contaminated soil pockets. We observed the security and control of excavated and stockpiled radioactive material prior to its shipment, and reviewed your radiological surveys of the dump truck and excavator.

We performed a site walk down with you on 11/29/04, during which we discussed the planned excavation activities, observed that the locations of the soil pockets had been recorded with a Global Positioning System, and observed that the stockpiled soil was staged on a tarp for migration control. We returned to the site during the week of 12/13/04 and observed excavation of the soil pockets. The locations had been resurveyed and were clearly marked. The excavations were scanned with a rate meter to verify that the release criteria had been met. The rate meters being used were operating and calibrated. Postings and contamination control measures were adequate. We also observed that oversight of the decommissioning contractor was being performed, and that Heritage personnel were involved in all decisions related to contractor work.

We determined that decommissioning and remediation activities during this inspection period met regulatory requirements for radiation protection, security and control of radioactive materials, and licensee involvement and contractor support.

2) Under the second inspection area, we observed radioactive material shipments and reviewed shipping manifests and survey records to determine that NRC and DOT requirements for placarding and marking, shipping paper documentation, and radiation exposure limits were being met.

We observed numerous shipments of the approximately 540 tons of contaminated soil from your site to the IUC facility in White Mesa, UT. We found the shipments were prepared,

B-60

labeled, and controlled in accordance with regulations. We interviewed the shipping contractor and several truck drivers and identified no safety concerns.

We determined that the rad waste shipments were performed in accordance with the applicable regulations.

3) Under the final inspection area, we reviewed your March 4, 2005 request for license termination and conducted independent surveys of remediated areas. We reviewed the results of all of these surveys and documents to determine whether you have met the decommissioning criteria in your approved DP.

Specifically, on December 14-15, 2004 and again on January 20, 2005, we obtained side by side soil samples of the excavated pockets with you decommissioning contractor. We also performed a gamma walkover survey of the boundary encompassing your licensed area. Based on the walkover survey, we determined that all licensable source material within the bounded area has been removed. We reviewed both your results and our results of the side by side soil samples to provide additional verification that the cleanup criteria of 10 pci/g total thorium and uranium had been met. Although one NRC sample exceeded 10 pci/g, based on the results of your samples as well as our review of the procedures and cross check data for the laboratory that analyzed your samples, we did not require additional remediation of that location. We determined that all licensable material within the NRC-licensed areas has been identified and remediated to satisfy the approved decommissioning criteria in the DP.

We also reviewed your request for license termination, with the soil sample analyses, and survey data for the mill pads and wet and dry mill equipment that has been dismantled and disposed. We investigated a NJDEP concern about an underground pipe that was described in a 11/30/98 letter from HMI to the NRC as being used to transport licensed material from the wet mill to the dry mill. Based on our investigation, we have determined that the pipe has most likely been removed from the site. We obtained copies of shipping papers for the soil disposal. Based on these reviews, we have determined the documentation contained in your request for license termination is complete.

Because Heritage is a former SDMP site, it is not required to comply with the dose requirements for unrestricted release in the License Termination Rule, it is required instead to meet the contamination-based cleanup criteria in the approved site DP. As we have previously communicated to you, we are required to evaluate the resultant dose impact of the site and compare this against the LTR. To meet this requirement, we performed a dose assessment of the licensed portions of the site utilizing a the most likely dose scenario of Suburban resident. We provided you a draft of the dose assessment that had resulted in a maximum dose of 43 mrem/yr and received your comments dated 10/25/05. We have considered those comments, and are providing a response to each. Briefly, we have incorporated most of the language changes on the site history. We considered your comment on the inapplicability of the Resident Farmer scenario, which we also evaluated and included in the dose assessment.