

May 4, 1999

Department of the Army
ATTN: Colonel Daniel F. Uyesugi
Assistant Commandant
ATZN-CMA-HP (385-11 m)
U. S. Army Chemical School
Fort McClellan, Alabama 36205

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING
DECOMMISSIONING PLANS FOR MATERIALS LICENSE NO. 01-02861-05
(DOCKET NO. 030-17584)

Dear Colonel Uyesugi:

This refers to the decommissioning plans you forwarded with letters dated March 2 and 19, 1999, for the burial mound, radiological laboratories, and alpha field, listed on NRC Materials License No. 01-02861-05. Supplemental information was provided in your letter dated April 19, 1999. Additional information is required in order for us to continue our review of these plans. This was discussed with Mr. May, the Radiation Safety Officer, on March 30, and April 19, 1999.

In your letter dated March 19, 1999, you stated that the burial mound will be decommissioned to meet the criteria in 10 CFR 20.1403. If it is your intent to release the burial mound under restricted conditions, the following information must be provided:

1. 10 CFR 20.1403(a) requires you to demonstrate that reductions in residual radioactivity necessary to comply with the provisions of 10 CFR 20.1402 would result in net public or environmental harm or will not be made because the residual levels associated with restricted conditions are ALARA. Determination of the levels which are ALARA must take into account consideration of detriments, such as traffic accidents, expected to potentially result from decontamination and waste disposal. Please address these requirements in your response.
2. 10 CFR 20.1403(b) requires you to make provisions for legally enforceable institutional controls that provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem per year. Please delineate the legally enforceable institutional controls.
3. 10 CFR 20.1403(c) requires you to provide sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site. Acceptable financial assurance mechanisms are listed in the regulation. Please discuss your financial assurance provisions.

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4. 10 CFR 20.1403(d) requires the decommissioning plan to document how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice. The topics to be addressed are listed in the regulation. You are required to provide for participation by representatives of a broad cross section of community interests who may be affected by the decommissioning, including an opportunity for collective discussion and a publicly available summary of the results of all such discussions. Please describe how you will seek, analyze, and document the advice from the affected community.
5. 10 CFR 20.1403(e) requires you to reduce radioactivity at the site so that if the institutional controls were no longer in effect, there would be reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group is ALARA and would not exceed either 100 mrem per year or 500 mrem per year provided that you demonstrate that further reductions in residual radioactivity necessary to comply with the 100 mrem per year criteria are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm. You would be required to make provisions for durable institutional controls and provide sufficient financial assurance to enable a responsible government entity or independent third party, to carry out periodic rechecks of the site no less frequently than every five years to assure that the institutional controls are in place, and to control and maintain these controls if necessary. Please address this requirement in your response.

We will continue review of your decommissioning plan for the burial mound when all the criteria in 10 CFR 20.1403 are adequately addressed.

If after receipt of this letter, you decide to decommission the burial mound in accordance with the criteria contained in 10 CFR 20.1402 for unrestricted release, and you intend to continue to base the model you used for dose assessment on the National Guard as the critical group, please describe your reasoning for your selection of this critical group. You stated that the Pelham Range will be used by the National Guard for the next thirty years, with possible access by hunters or trespassers, and that access will be controlled to this area through controlled roads, fences or gates. Please address what controls will be in place to provide a high assurance that access to the area will be as you described for the next thirty years. Some examples of durable institutional controls and engineered barriers are restrictive covenants, deed restrictions, zoning controls, drilling restrictions, and erosion protection.

Additionally, your plan for the burial mound raised another question. You stated, on page 3-1, in the third paragraph of the plan, "An excessive number of leaking locally fabricated Co-60 sources contributed to the formation of the on-site "Burial Mound" for use as an interim on-site disposal cell." The contaminated soil resulting from historically leaking sources was accumulated and transported to the location which is now designated as the "Burial Mound." The second paragraph on page 1-4 states "Although substantiating documents (shipping papers) have not been located, reference is made to the proper disposal of all locally fabricated Co-60 sources." Despite the reference to the proper disposal of all locally fabricated

Co-60 sources, one such source was found, recovered, and properly disposed of in 1985 from the area referred to as the "Burial Mound." What assurance is there that the contamination is limited to the area of the burial mound?

The first paragraph on page 1-3 stated "it may appear that both soluble and insoluble contamination exists " in the burial mound. Section 3.1.5 on page 5 in Appendix 6 stated "rainwater percolating through the pile may mobilize one or both of these contaminants." Please address the issue of groundwater movement. What assurance is there that the contaminants have not migrated from the burial mound or have not contaminated the groundwater? 10 CFR 20.1402 limits include groundwater sources of drinking water.

Furthermore, please review 10 CFR 51.10 regarding the National Environmental Policy Act and provide the information delineated in 10 CFR 51.60 and 10 CFR 51.45 regarding environmental reports. If you conclude that you meet the criteria for a categorical exclusion under 10 CFR 51.22, please describe the basis for this conclusion.

Our review of your decommissioning plan for the radiological laboratories and alpha field will continue when you address the following concern. On page 7 of the plan you stated that the release limits for exposure rates will be 5 microrem per hour above background at one meter, which you categorize as the limit routinely applied by the NRC where site specific criteria has not been established. These have been superceded by the release criteria contained in 10 CFR 20, Subpart E - Radiological Criteria for License Termination. Subpart E to 10 CFR 20 is applicable as the release criteria for your facility. Please resubmit your decommissioning plan incorporating the current release criteria.

If you have any questions, please call me at (404) 562-4739.

Sincerely,

Tom Decker for

Orysia Masnyk Bailey, License Reviewer
Division of Nuclear Materials Safety

Docket No. 030-17584
License No. 01-02861-05

cc: (See page 4)

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