



SHIELDALLOY METALLURGICAL CORPORATION

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September 11, 2003

Kenneth L. Kalman
Decommissioning Branch
Division of Waste Management
Office of Nuclear Materials Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Preferred Approach to Decommissioning the Newfield Facility (License No. SMB-743, Control No. 132074) - Rev. 001

Dear Mr. Kalman:

The attached letter is a revision to Shieldalloy Metallurgical Corporation's (SMC's) August 26, 2003 letter. The revisions made to this letter (second paragraph of the letter) are pursuant to the discussion and understanding we reached during this past Tuesday's (September 9, 2003) conference call between USNRC (HQ and Region I) and SMC / Integrated Environmental Management, Inc. (IEM). The attached letter supersedes the August 26, 2003 and therefore it is requested that you remove the original letter and replace it with this letter.

In the meantime, please do not hesitate to call me at (856) 692-4200, ex. 226 if I can answer any questions or provide you with additional information.

Sincerely,

David R. Smith
Radiation Safety Officer

cc: Eric Jackson
Joe Diegel
Charles L. Harp, Esq. - Archer & Greiner
Carol D. Berger, C.H.P. - IEM
Robert Johnson - USNRC (Hq)
Ronald Bellamy - USNRC Region I
Marie Miller - USNRC Region I



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Dear Mr. Kalman:

On July 30, 2003, Shieldalloy Metallurgical Corporation (SMC) forwarded to you an Action Plan and commitment dates as part of a phased approach to resubmission of the SMC decommissioning plan. Since the Action Plan was submitted, SMC and representatives of the USNRC have participated in a number of monthly conference calls to discuss various matters related to decommissioning. In our August 22, 2003 call, Mr. Ken Kalman, Mr. Robert Johnson, and SMC agreed to an alternative deliverable for Item No. 6 of the Action Plan. At the time, Item No. 6 of the Action Plan required SMC to "Present the results of the ALARA analysis to the USNRC to secure approval for the preferred decommissioning approach" on August 29, 2003. During that phone call it was agreed that SMC would present its preferred decommissioning approach, with justification, and with feedback from potentially affected parties on August 29th. The purpose of this letter is to provide you with that information.

In order to decommission the Newfield facility, SMC intends to move all licensed radioactive material present at the site to the Storage Yard, where it will be stabilized and capped as described in our August 28, 2002 decommissioning plan.³ At that time, SMC will amend License No. SMB-743 to permit "possession only" of the approximately 58,000 cubic meters of slag, baghouse dust, demolition debris and soil under the cap. From analysis performed to date using very conservative exposure scenarios, SMC is confident that this approach will ensure no member of the general population will incur a radiation dose in excess of 25 millirem TEDE per year for 1,000 years, as long as the USNRC possession only license remains in place. It will also ensure that no member of the general population will incur a radiation dose in excess of 100 millirem TEDE per year for 1,000 years if the institutional controls should fail.

The decision to pursue "restricted release" of the site was made after consideration of three decommissioning options. There were: (1) restricted release, (2) unrestricted release, wherein all residual radioactivity is excavated, shipped and disposed of at a low-level waste disposal facility in Clive, Utah, and (3) no action. An ALARA analysis of the same three options, performed for a site

³ Shieldalloy Metallurgical Corporation, "Decommissioning Plan for the Newfield Facility", Report No. 94005/G-28247 (Rev. 0), August 28, 2002.

with equivalent residual radioactivity and with other site parameters that are similar to those at SMC's Newfield site, forms the basis for SMC's decision at Newfield. And while it is reasonable to rely upon a non-site-specific analysis for initial planning purposes, SMC will include a site-specific ALARA analysis of the three options in its revised decommissioning plan, currently being prepared for submission to the USNRC. The site-specific analysis will demonstrate that Option (1) for Newfield results in population doses that are as low as reasonably achievable (ALARA), and that further attempts to reduce the dose potential at the site would increase rather than reduce the overall risk associated with the decommissioning.

SMC has convened a Site Specific Advisory Board (SSAB) to provide input to the decommissioning process, and to provide feedback on the various decommissioning options available to SMC. In an August 15, 2003 meeting of the SSAB, there was agreement that maintaining a "possession only" license, with the USNRC serving as the government entity to ensure durability of institutional and physical controls, was preferable to assigning that responsibility to a local or state agency, as described in the August 28, 2002 version of the decommissioning Plan. However, the SSAB also asked that the viability of other decommissioning options (i.e., beneficial reuse of the slag or baghouse dust) continue to be evaluated. If any are deemed feasible, SMC agreed to repeat the ALARA analysis with the new option incorporated into the comparison.

In summary, SMC is committed to decommissioning the Newfield site under "restricted release" conditions, and to maintaining a "possession only" license as one means of ensuring the durability of institutional controls. This approach has been deemed ALARA in NUREG-1543 which evaluated the decommissioning and environmental impact at a site with similar radiological and physical characteristics as the Newfield site. Due to the strong similarity between the two sites this very same approach is likely to be ALARA for Newfield as well. Nonetheless, a site-specific ALARA analysis demonstrating that further reductions in dose are unwarranted will be included in the re-submission of our decommissioning plan. And if other decommissioning alternatives appear feasible, they will be included in the ALARA analysis along with Options (1), (2) and (3), described above.

Because the scope and extent of this deliverable differs from that which appears in our Action Plan, we are also taking this opportunity to submit a revised Action Plan (attached). This revision incorporates the outcome of our discussions with the USNRC during our monthly conference calls, and it supercedes the July 30th version in its entirety.

We will continue to keep you apprized of any other matters that might impact our decommissioning plans, and we will continue to participate in the on-going teleconferences and meetings with the staff. In the meantime, please do not hesitate to call me at (856) 692-4200, ex. 226 if I can answer any questions or provide you with additional information.

Sincerely,

David R. Smith
Radiation Safety Officer

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