

November 15, 2001

MEMORANDUM TO: Melvyn Leach, Chief  
Fuel Cycle Licensing Branch, NMSS/FCSS

FROM: Claudia Craig, Chief **/RA/**  
Facilities Decommissioning Section  
Decommissioning Branch, NMSS/DWM

SUBJECT: REVIEW OF SHIELDALLOY DECOMMISSIONING FUNDING PLAN  
REVISION 2

We have reviewed Revision 2 to the Decommissioning Funding Plan submitted by Shieldalloy Metallurgical Corporation.

The staff found that the DFP requires additional information to meet regulatory requirements. In particular, the licensee must clarify the amount of its decommissioning cost estimate, certify that it has obtained financial assurance in the amount of its decommissioning cost estimate, and submit the original signed financial instrument obtained.

The staff noted that accepting the licensee's DFP, when it meets regulatory requirements, does not constitute approval of *in situ* waste disposal.

The staff found that the licensee is required to submit financial assurance to NRC regardless of its obligations to other government agencies, unless the licensee requests and is granted an exemption from this requirement.

The staff will release funds currently held in trust only after replacement financial assurance has been submitted to NRC and found to be acceptable.

Docket No.: 04007102  
License No.: SMB-743

Attachment: Request for Additional Information

Contact: Thomas L. Fredrichs, NMSS/DWM/DCB  
(301) 415-5971

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**REQUEST FOR ADDITIONAL INFORMATION  
SHIELDALLOY DECOMMISSIONING FUNDING PLAN, REV. 2**

Introduction

The staff reviewed Revision 2 of the Decommissioning Funding Plan (DFP), dated September 10, 2001, submitted by Shieldalloy Metallurgical Corporation (Shieldalloy) by letter dated October 1, 2001. The DFP provides a cost estimate for decommissioning the licensee's Newfield, New Jersey site.

The staff found that the DFP was incomplete, since it did not include all the documents required by Nuclear Regulatory Commission (NRC) regulations. In addition, in its submittal letter, the licensee proposed a condition to provide financial assurance to NRC after the U.S. Environmental Protection Agency (EPA) and the State of New Jersey Department of Environmental Protection (NJDEP) agree to an equivalent reduction in the amount of financial assurance provided to them. The NRC's regulations do not provide for the licensee's proposed condition.

The staff noted that the licensee's DFP cost estimate is based on *in situ* disposal of radioactive wastes on its property. The staff notes further that acceptance of the DFP, once it meets regulatory requirements, does not constitute approval of the decommissioning methods assumed by the licensee for purposes of performing a cost estimate. If the estimated cost of decommissioning rises as a result of higher costs for offsite waste disposal, or other reasons, NRC regulations require the licensee to provide additional financial assurance at that time.

Finally, the licensee requested that NRC release funds currently held in trust by Chase Manhattan Bank. The NRC will release the funds after it receives and finds acceptable the licensee's submittal of another form of financial assurance adequate to cover the estimated cost of decommissioning.

Discussion

*Decommissioning Funding Plan*

The provisions of 10 CFR 40.36(d) require that a DFP must contain the following five items: a cost estimate for the decommissioning; a description of the method of assuring funds for decommissioning; a description of the means used to adjust the cost estimate and associated funding levels periodically over the life of the facility; a certification that financial assurance has been provided in the amount of the cost estimate; and, finally, a signed original of the financial instrument obtained. The staff reviewed the licensee's DFP against these requirements to determine if each item is included in the DFP.

The staff found that the DFP contains a cost estimate for decommissioning. However, there is a discrepancy on the actual figure. Section 5.1, on page 14 of the DFP, states that the estimated cost of decommissioning the Newfield site is \$2,977,845. However, footnote 33, at the bottom of page 14, states that the total cost estimate is \$3.15 million. The licensee must clarify this discrepancy.

Section 6, on page 15, describes the proposed method of financial assurance. Section 5.2, on page 14, describes the means used to adjust the cost estimate and associated funding levels periodically over the life of the facility. These descriptions are adequate.

However, the DFP does not include the following documents:

- 1) certification that financial assurance has been provided in the amount of the cost estimate, and
- 2) a signed original of the financial instrument obtained.

Therefore, in order for the licensee's DFP to meet the requirements of 10 CFR 40.36(d), the licensee must clarify the discrepancy in the cost estimate total and submit the documents listed above.

#### *In Situ Waste Disposal*

The staff notes that the licensee's DFP cost estimate is based on *in situ* disposal of radioactive wastes on the licensee's property. Consequently, no expenses were included in the cost estimate to dispose of radioactive waste at an offsite disposal site. The licensee states, in Section 3.2, page 10 of its DFP, that the requirements of 10 CFR 20.1402, which are the radiological criteria for unrestricted use, form the basis of its decommissioning effort. The regulations of 10 CFR 40.36(d) do not require additional information, such as dose modeling, regarding the basis of the assumptions made for the purpose of estimating the cost of waste disposal, nor has the licensee provided detailed plans for its proposed *in situ* disposal method.

Therefore, acceptance of the licensee's DFP, when it meets the requirements of 10 CFR 40.36(d), does not constitute NRC approval of the disposal methods assumed for purposes of estimating the cost of decommissioning. The staff will review the adequacy of, and, if appropriate, approve the *in situ* method after the licensee submits the detailed plans of its proposed disposal method. It is possible, after Shieldalloy submits its detailed plans, that *in situ* disposal may not be approved, and disposal costs may be higher than estimated in Revision 2 of the licensee's DFP. If the estimated cost of decommissioning rises as a result of higher costs for offsite waste disposal, or other reasons, NRC regulations require the licensee to provide additional financial assurance at that time.

#### *Conditional Provision of Financial Assurance*

The staff notes that the licensee's October 1, 2001 letter indicated that it would submit financial assurance, adequate to cover the cost of decommissioning, to NRC on the condition that the EPA and the NJDEP agree to an equivalent reduction in the amount of financial assurance provided to them. However, the NRC's regulations do not provide for conditions such as the one proposed by the licensee.

Therefore, the licensee is required to provide financial assurance to the NRC for the full amount of the cost of radiological decommissioning, whether or not EPA and NJDEP allow it to reduce its obligations to them. The licensee's alternative to providing financial assurance to the NRC for the full amount of the cost of radiological decommissioning is to submit a request for an exemption from the requirements and include adequate justification for the request. The NRC will then determine whether an exemption will be granted.

### *Release of Current Trust Fund*

The licensee requested that the NRC release the funds currently held in the NRC Financial Assurance Fund trust account under the trusteeship of Chase Manhattan Bank when financial assurance has been provided with another financial instrument. The regulations of 10 CFR 40.36(e) permit a licensee to choose among any of the financial mechanisms listed in that section. Implicit in that regulation is the flexibility to change financial mechanisms at the licensee's discretion. However, in order to prevent a gap in the financial assurance coverage, the licensee must provide a replacement mechanism before an existing mechanism can be canceled.

Therefore, after the licensee provides an acceptable replacement for the NRC Financial Assurance trust fund, the funds can be released. However, the trust fund can not be released until the NRC has an acceptable replacement financial assurance instrument in its possession.

### Summary

The staff found that the DFP requires additional information to meet regulatory requirements. In particular, the licensee must clarify the amount of its decommissioning cost estimate, certify that it has obtained financial assurance in the amount of its decommissioning cost estimate, and submit the original signed financial instrument obtained.

The staff noted that accepting the licensee's DFP, when it meets regulatory requirements, does not constitute approval of *in situ* waste disposal.

The staff found that the licensee is required to submit financial assurance to NRC regardless of its obligations to other government agencies, unless the licensee requests and is granted an exemption from this requirement.

The staff will release funds currently held in trust only after replacement financial assurance has been submitted to NRC and found to be acceptable.

### Conclusion

In order for its DFP to meet the requirements of 10 CFR 40.36(d), Shieldalloy must provide the following additional documents:

- 1) clarification of the amount of the decommissioning cost estimate,
- 2) certification that financial assurance has been provided in the amount of the cost estimate, and
- 3) a signed original of the financial instrument obtained.