

Sollenberger, Dennis

FSME

From: Kenneth Kalman
Sent: Wednesday, September 13, 2006 10:34 AM
To: Dennis Sollenberger
Subject: smc info
Attachments: The Shieldalloy Metallurgical Corporation report.wpd

Dennis,

I lifted this from our site summary database which I updated yesterday. It is not great prose but should give you all the info you need.

Ken

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The Shieldalloy Metallurgical Corporation (SMC) site is located in Newfield, New Jersey. Contamination is in the form of facility-generated slag and baghouse dust. The major contaminants are natural uranium and natural thorium. The site is also on the National Priorities List under CERCLA, because of past operations involving chromium-contaminated onsite groundwater. Remediation of the groundwater is currently taking place.

In August 2001, SMC notified NRC that it had ceased production activities using source material. On August 27, 2001, the licensee provided notification and intent to decommission. The license is in timely renewal, and was amended on November 4, 2002, to authorize only decommissioning activities that were previously permitted. The licensee submitted a revised license renewal application on May 1, 2003.

The licensee estimates the cost of decommissioning to be approximately 1.8 million dollars.

Facility Operating History The SMC facility manufactures or has manufactured specialty steel and super alloy additives, primary aluminum master alloys, metal carbides, powdered metals, and optical surfacing products. One of the raw materials that was used in its manufacturing processes from 1955 to 1998 is classified as source material under 10 CFR Part 40. This material, called pyrochlore, is a concentrated niobium ore containing greater than 0.05 percent natural uranium and natural thorium. SMC was licensed by the NRC to ship, receive, possess, use and store source material under SMB-743. During the manufacturing process, the facility generated slag, and baghouse dust. Currently, there is approximately 18,000 m³ (635,580 ft³) of slag and approximately 15,000 m³ (529,650 ft³) of baghouse dust contaminated with natural uranium, thorium, and daughters stored on-site.

Should SMC find a buyer for both the slag, which could be used as a fluidizer by steel manufacturers, and for the baghouse dust, which could be substituted for lime in the production of cement, the volume of waste would be greatly reduced, and the licensee would most likely request license termination for unrestricted use.

The SMC Decommissioning Plan (DP) dated August 30, 2002 was received September 11, 2002 but was rejected by NRC staff, because of deficiencies. The staff met with Shieldalloy on April 16, 2003, to discuss the DP deficiencies and revising the DP using the staff's phased approach. For this site, the phased approach consisted of meetings to discuss and seek agreement on the licensee's approach to institutional controls and financial assurance before the licensee conducts the work needed to address the deficiencies identified by the staff and resubmit a revised decommissioning plan.

In addition, NRC staff recognized a need to provide SMC with guidance regarding pertinent License Termination Rule issues such as the use of a possession only license for long term control (LTC) of the site and provided it to SMC in May 2004. A meeting between NRC and SMC was held on June 29, 2004 to ensure that SMC understood the guidance. SMC submitted a revised decommissioning plan in October 2005. NRC staff

completed its acceptance review and rejected the DP in January 2006. The staff met with SMC in March 2006 to discuss the deficiencies in the DP and develop a path forward for submittal of an acceptable DP. The NRC staff and NJDEP staff also visited the site in April 2006 to discuss erosion control design. Pursuant to comments received at these interactions, SMC submitted a supplement to its DP in June 2006. The NRC staff will complete its acceptance review of the supplement in September 2006 and determine whether there is sufficient information to proceed with its technical review.

Technical And Regulatory Issues SMC has found it difficult to sell the slag material. Several attempts to export the material have failed. SMC intended to sell the baghouse dust to a local cement manufacturer, however, no buyer has been found. Regardless of whether the sales occur, SMC has proposed to dispose of these materials on site in an engineered cell.

Although the LTC approach is in the early stages of planning, State of New Jersey officials (e.g., New Jersey Department of Environmental Protection (NJDEP), Senator Corzine, State Senator Madden) have expressed concerns with the use of NRC's LTC license for the SMC site. Their concerns are: 1) the proposed approach would create an unlicensed low-level radioactive waste disposal facility; 2) that there has not been a meaningful opportunity for community discussion; and 3) the radioactive material should be disposed of and not left for future generations.

SMC has less than adequate financial assurance for decommissioning.