



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 4 1993

Docket 40-7102
License SMB-743

Ms. Donna L. Gaffigan
Case Manager
Bureau of Federal Case Management
Division of Responsible Party
Site Remediation
State of New Jersey Department
of Environmental Protection
and Energy
CN 028
Trenton, NJ 08625-0028

Dear Ms. Gaffigan:

SUBJECT: STANLEY SITE VISIT MEMO

Thank you for sending us a copy of Thomas McGinty's Site Investigation Report and Nancy Stanley's Site Visit Memo for the site visit to Shieldalloy Metallurgical Corporation (SMC) on February 17-18, 1993.

Upon my perusal of the subject documents, I did note with concern that Ms. Stanley's Site Visit Memo states that "It is clear that Shieldalloy continues to be out of compliance with current exposure limits for the Nuclear Regulatory Commission (NRC) licensed activities, specifically in the vicinity of the ferro-columbium slags." I assume, based upon the figure of gamma exposure rates attached to the memo, that Ms. Stanley's concern is with the exposures she measured at the Ferro-Columbium Standard Slag Pile (1200-2000 μ R/hr) and near the fence line (200 μ R/hr).

Because the slag yard is a restricted area, 10 CFR 20.101 limits exposure at the slag piles. This regulation limits a worker's exposure to less than 1.25 Rem per calendar quarter. If an employee were to work in this area for 40 hour weeks (considering 13 weeks in a quarter), the dose rate would have to exceed 2.4 mR/hr to exceed NRC exposure limits. Based upon Ms. Stanley's highest measurement of 2 mR/hr, an employee could work in the slag yard continuously during their shift and not exceed NRC limits. In actual practice, Shieldalloy employees spend only minimal time in the slag area and receive dramatically less exposure than allowed by NRC regulations. This is also demonstrated by historical records of individuals' dosimeter measurements.

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Ms. Donna L. Gaffigan

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The measurements at the fence line are more of a concern because limitations to members of the public apply. A licensee may not expose a member of the public to radiation levels which, if an individual were continuously present in the area, could result in them receiving a dose in excess of 2 millirems in any 1 hour (§ 20.105(b)(1)) or 100 millirems in any 7 consecutive days (§ 20.105(b)(2)). As shown by Ms. Stanley's measurements, the dose to a member of the public standing at the fence line would be only 0.2 millirem in an hour or less than 34 millirems in 7 consecutive days. Shieldalloy is therefore in compliance with 10 CFR 20.105.

Based on the above, the NRC does not consider Shieldalloy to be out of compliance with current exposure limits for the NRC licensed activities.

If my understanding of Ms. Stanley's comment is incorrect or if you have other questions regarding this letter, please feel free to call me at (301) 504-2667 or Mike Tokar at (301) 504-2590.

Sincerely,

Original Signed By:

Gary C. Comfort, Jr.
Licensing Section 2
Licensing Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

cc: Mr. Dave Smith
Shieldalloy Metallurgical Corporation

JTG

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