



# UNITED STATES NUCLEAR REGULATORY COMMISSION

OFFICE OF PUBLIC AFFAIRS, REGION I  
631 Park Avenue, King of Prussia, Pa. 19406

No. I-83-112

September 6, 1983

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NRC STAFF CITES NUCLEAR METALS INC. OF CONCORD, MA. FOR ALLEGED VIOLATION OF RADIATION PROTECTION REQUIREMENTS; PROPOSES \$9,600 FINE

The staff of the Nuclear Regulatory Commission has cited Nuclear Metals, Inc. of Concord, Massachusetts, for alleged violation of NRC requirements for radiation protection of its workers. The staff proposes to fine the company \$9,600.

Inspections conducted by NRC Region I radiation specialists in May and June 1983, found that workers had received radiation exposures to their skin and hands that was in excess of NRC regulatory limits, during the fourth calendar quarter of 1982 and the first quarter of 1983. The workers have not shown any indication of radiation injury.

"The violations apparently occurred because of weaknesses in the management control of your radiation safety program which resulted in inadequate evaluation of the exposure of the workers' hands and assignment of inadequate extremity dosimetry," the company was told in a letter by Dr. Thomas E. Murley, Regional Administrator of Region I.

The letter also said that in November 1982, "one of your health physics technicians informed one of your health physicists of a problem with contamination control and your dose monitoring procedure, and corrective action to evaluate and limit exposure was not taken at that time."

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The letter referred to the accumulation of radioactive dust on the work gloves worn by workers in a foundry operation that is part of the company's fabrication of products from uranium metal that has been depleted in its fissionable ingredient, the isotope uranium-235. NRC inspectors found that prolonged contact with the gloves exposed the hands to higher radiation levels than was indicated by radiation measurement devices worn on the wrists of the workers.

NRC radiation exposure limits for workers per calendar quarter are 7.5 rem to the skin of the whole body and 18.75 rem to the hands.

The NRC staff alleges that one worker received 8.1 rem to the skin of his body in the fourth quarter of 1982, and that ten to 15 individuals working in the foundry in the last quarter of 1982 and the first quarter of 1983 received an estimated dose of 125 rem to their hands each quarter.

Nuclear Metals also was cited for two other alleged violations of NRC requirements for which no fine is proposed. These involved allegedly allowing workers to leave the plant with skin contamination without adequate management review, and for not taking additional follow-up actions; and for allegedly failing to notify the NRC within 24 hours, as required, of information that one employee's radiation-measuring film badge had indicated a dose of 110 rem. This was reported to Nuclear Metals by the service company that regularly processed these film badges for Nuclear Metals.

The company has 30 days to either pay the proposed fine or to request in writing that part or all of it be withdrawn, giving its reasons for such a request. The company also has 30 days to write to the NRC staff what it has done or will do to prevent a recurrence of these alleged violations.

The Commonwealth of Massachusetts has been informed of this proposed enforcement action.