



NUCLEAR METALS, INC.

2229 MAIN STREET
CONCORD, MASSACHUSETTS 01742
TELEPHONE: 617 369-5410

February 13, 1979

U.S. Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, PA 19406

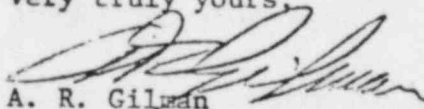
Subject: Inspection 78-02 License No. SMB-179

Gentlemen:

Our letter of September 19, 1978, item 3, pointed out that reports from our consultants would be forthcoming relative to methods of collecting samples of effluent air and evaluations of our bioassay program. We are enclosing these reports for your review. The recommendations contained therein have been implemented.

Should you have further questions, please contact the undersigned.

Very truly yours,


A. R. Gilman
Radiation Safety Officer

Enclosures: 1) Letter, Frederick J. Viles, Jr. to Herbert Sawyer
2) Letter, Samuel Levin to Alden R. Gilman

A11

✓ Docket No. 40-0672

SEP 20 1979

~~SEP 19 1979~~

Nuclear Metals, Inc.
ATTN: Mr. W. B. Tuffin
President
2229 Main Street
Concord, Massachusetts 01742

Gentlemen:

Subject: Inspection No. 40-0672/79-01

This refers to your letter dated September 7, 1979, in response to our letter dated July 30, 1979.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a subsequent inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

Robert O. McClintock, Chief
Materials Radiological Protection
Section

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SURNAME	Glenn/clc	McClintock				
DATE	9/19/79	9/19/79				

NUCLEAR METALS INC.

7 September 1979

United States
Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: Your Letter of July 30, 1979

Reference: Inspection No. 40-0672/79-01

Gentlemen:

This letter responds to questions contained in your letter of July 30:

1. We are measuring and evaluating air quality to assure that inhalation limits of 10 CFR 20.103 have not been exceeded, and are using urinalysis data in accordance with guidelines contained in Regulatory Guide 8.11 as a confirmatory measure relative to air quality data. There are both "always on" and breathing zone samples taken throughout each month as part of the air quality evaluation. Our action limits for urinalysis data are: investigation at greater than 60 $\mu\text{g}/\text{L}$, transfer at greater than 120 $\mu\text{g}/\text{L}$. In order to evaluate results in excess of these limits, we are following the steps outlined in F. P. Cornetta's memo to A. R. Gilman dated 29 August 1979 (Enclosure 1).

2. The ventilation flow in our airborne radioactivity area was substantially increased by new equipment installations completed during our July 1 through July 16 plant shutdown. The new systems were operational effective July 16. We operated the vents for two weeks and collected samples to evaluate air quality improvement. An improvement has been seen in this initial data.

3. We have added to our film badge program such that all of our employees have been issued a film badge. An instructional memorandum has been issued (Enclosure 2), relative to how to wear the badge. Data for employees who do not routinely handle uranium will be used to establish a baseline allowing us to refine the program when we begin use of TLD badges, that are now on order as a "quick answer" replacement for our current film badges.

4. An instructional document concerning radiation protection, radioactive materials processing information, and problems relative to specific areas under the jurisdiction of line supervisors is being developed. This will be included in the informal discussions between our Health Physicist and individual line supervisors which occur on a quarterly basis. Furthermore, instructions in the form of notices, memos, and signs will be posted in work areas to supplement and reinforce the verbal instruction.

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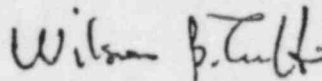
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7 September 1979

Yes, I personally spoke to line supervisors to emphasize Management's commitments to radiation safety; memo of June 19 attached.

5. We are preparing a license amendment to base compliance with 10 CFR 20.106 on dilution factors as determined by our consultants.

Sincerely,
NUCLEAR METALS, INC.



Wilson B. Tuffin
President

WBT/ig

Encls:



✓ Docket No. 40-0672

Nuclear Metals, Inc.
ATTN: Mr. W. B. Tuffin
President
2229 Main Street
Concord, Massachusetts 01742

JUL 30 1979

Gentlemen:

Subject: Inspection No. 40-0672/79-01

This refers to your letter dated June 19, 1979, in response to our letter dated May 15, 1979.

Thank you for confirming and defining your actions and understandings as discussed at your facility on March 29, 1979. However, we find that more detailed information is required. Specifically, we need your detailed response to the following items:

- (1) How will you evaluate urinalysis results in excess of your action limits to assure that the inhalation limits of 10 CFR 20.103 have not been exceeded? In addition, how will you evaluate multiple urinalysis results for a single individual during a calendar quarter to assure that inhalation limits have not been exceeded?
- (2) What is the status of your plan to increase ventilation flows in your airborne radioactivity areas?
- (3) What groups of individuals have been added to your film badge dosimetry program? What changes in practice have occurred as a result of your review to assure that badges are worn to give the most representative dose estimate to the skin and to the whole body?
- (4) When was training given to line supervisors and what radiation protection procedures were covered during this training? Did you personally speak to the line supervisors emphasizing management's interest in radiation safety?

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FFB MS
Glenn/jm
7/30/79

FF&MS
McClintock
7/30/79

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PAR/LPAR

With regard to your evaluations of effluent airborne concentrations and of dilution factors for stack releases, you are reminded that your current procedures (Item 3, Supplemental Sheet No. 5, Application dated September 1, 1974) require that stack sample results be evaluated on the basis of 10 CFR 20.106. If you wish to base compliance with 10 CFR 20.106 on stack sample results with dilution factors, you are advised to submit a request to amend your licensed procedures to the USNRC, Division of Fuel Cycle and Materials Safety, License Management Branch, Washington, D.C. 20555.

Your cooperation with us is appreciated.

Sincerely,

Robert O. McClintock, Chief
Materials Radiological Protection
Section

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