



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SEP 29 1993

MEMORANDUM FOR: Robert M. Bernero, Director  
Office of Nuclear Materials Safety  
and Safeguards

FROM: Charles E. Norelius

SUBJECT: MEETING TO PLAN NPI INSPECTION

On September 28, 1993, I and others of the NRC Staff met with representatives of the State of Maryland to plan for NRC assistance in a State inspection of Neutron Products, Incorporated (NPI). Other NRC participants were Bob Bores, Section Chief, RI; Craig Gordon, State Agreements Officer, RI; and Wayne Slawinski, Radiation Specialist, RIII. Maryland participants were Carl Trump, Program Administrator, Radioactive Materials Compliance, Ray Manley, Tom Fergeson and Alan Jacobson. Ray Manley will be leading the team inspection at NPI.

Inspection Plan

The State requested NRC assistance to assess: 1) pathway analysis to determine unmonitored release paths of material from the facility; 2) regulatory and health physics implications from such releases; and 3) recommendations on any engineering controls to limit releases. Based on our discussions, it was decided to conduct a team assessment with "inside" and "outside" components. Both team components will have State and NRC participants.

The in-plant inspection will address the basic processes in which Cobalt 60 is used, primarily the hot cell operation. This will consider release paths from the process into the air, water and solid waste streams. A special attempt will be made to determine any unmonitored releases. The inspection will include a fire protection assessment to review possible radiological consequences from any fire that may occur; one focus of this aspect will be to review the waste storage area in which about 750 curies of cobalt 60 is stored in a variety of containers ranging from High Integrity Containers to plastic bags.

The outside team activities will center around the use of the Region I radiological measurements van. They will perform confirmatory measurements of licensee samples and will assess licensee methods of collection and analysis. Independent measurements will also be taken of surface and airborne contamination, with the locations to be determined during the inspection. The sanitary sewer disposal methods and pathway will be pursued to determine if there has been any reconstitution of materials in the process. Personal property surveys will be conducted if time permits; many of these have already been conducted by the State and the licensee.

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There will also be an ARMS overflight survey of the plant area and any additional areas that may be designated as a result of the review of the sanitary sewer system into which the material is discharged. This is being arranged by AEOD under an existing contract.

#### Dates and Logistics

The inspection is to be conducted October 18-22, 1993. The ARMS flight will be conducted as soon after that as can be arranged. It is important to the state to have all of the information from the survey completed before the end of the year, as information from the inspection and overflight may be useful to them as part of their ongoing litigation against NPI. A trial date with NPI has been set for January 4, 1994.

I will be providing the State with the names of the NRC participants before the end of this week. The inspection team will consist of 6-7 members. Craig Rogers will be handling the logistics of the NRC participants; the current plan is to have the team stay in Frederick, Md., during the inspection. Craig will also distribute to the participants copies of the Maryland license covering the hot cell and any related facility information.

We provided the State with inspection plans, an inspection report directed toward release pathways and offsite surveys, and a fire protection assessment, all related to AMS, for their consideration in planning and documenting the NPI inspection.

I will continue to keep in touch with the State and coordinate the efforts of NRC participants in this inspection. Please let me know if there are questions you wish to discuss.

*Charles E. Norelius*

Charles E. Norelius

cc: C. J. Paperiello, IMNS  
S. Schwartz, OSP  
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