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

FROM: Carlton Kammerer, Director original signed by Carlton Kammerer Office of State Programs

SUBJECT: TECHNICAL ASSISTANCE TO THE STATE OF MARYLAND ON THE NEUTRON PRODUCTS INC. (NPI) LICENSE

Attached is an August 6, 1992 request from the State of Maryland for technical assistance from the NRC on Neutron Products, Inc. (NPI) in the following areas:

A. Uncontrolled release of cobalt-60 from the NPI facility.

B. Radioactive material waste management practices at NPI.

C. Decommissioning of NPI.

I request NMSS' assistance in meeting this request from the State of Maryland. This has been an ongoing issue of discussion between NRC staff and the State of Maryland, per attached June 25, 1992 memorandum from W. Kane, RI to R. Cunningham and myself, and the August 6, 1992 memorandum from Vandy Miller. Specific questions in each of the above areas are discussed in the August 6, 1992 letter. It is our understanding that Region I is presently preparing resource estimates to meet this request. These resources need not come exclusively from Region I. Let's meet soon.

Attachments: cc: W. F. Kane, Deputy Administrator As stated Region I

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

FROM: Carlton Kammerer, Director Office of State Programs

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Attachments: cc: W. F. Kane, Deputy Administrator As stated Region I

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

August 18, 1992

MEMORANDUM FOR:

Robert Bernero, Director Office of Nuclear Materials Safety And Safeguards Carlton Kammerer, Director

FROM:

Office of State Programs-

SUBJECT:

TECHNICAL ASSISTANCE TO THE STATE OF MARYLAND ON THE NEUTRON PRODUCTS INC. (NPI) LICENSE

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Attachments: As stated

cc: W. F. Kane, Deputy Administrator Region I



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION 1

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## June 25, 1992

### **MEMORANDUM FOR:**

# Carlton Kammerer, Director Office of State Programs

Richard E. Cunningham, Director Division of Industrial and Medical Nuclear Safety

FROM:

William F. Kane Deputy Regional Administrator

SUBJECT:

NEUTRON PRODUCTS, INC. (NPI) ISSUES

As a follow-up to our conference call of June 15, I have enclosed a consolidated listing of issues concerning NPI which I believe we all agreed should be the subject of further discussions with the State. We believe that the process should involve the following major milestones.

1) Contact State management requesting a meeting to discuss mutual concerns about NPI.

2) Hold a two-part meeting with the State to include:

a) discussions with the State technical staff at which the NRC and State staffs would meet to discuss the current status of each of these issues and come to an agreement as to the issues that needed to be further evaluated; and

b) a management meeting with the State to reach agreement at that level on the issues requiring follow-up actions at NPI.

3) Recommend to the State that they conduct a "diagnostic" type inspection at NPI to further evaluate these issues. Participation by the NRC staff in such an inspection would likely occur, but only at the invitation of the State. Detailed plans for such an inspection would be worked out at a subsequent staff level meeting by the State and NRC staff.

4) Hold follow-up meetings with the State, as required, to address the need for improved operations at NPI and the strategy for achieving that goal.

John McGrath will set up the initial meetings with the State after we receive your agreement of the issues and approach.

The

William F. Kane Deputy Regional Administrator



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

August 6, 1992

MEMORANDUM FOR: Carlton Kammerer, Director Office of State Programs

FROM:

SUBJECT:

Vandy L. Miller, Assistant Director State Agreements Program

Office of State Programs

1. Mille

STAFF VISIT WITH THE STATE OF MARYLAND TO DISCUSS NEUTRON PRODUCTS, INC. (NPI) ISSUES

On August 4, 1992, the following individuals from NRC and the State of Maryland participated in a roundtable discussion on issues involving NPI:

NRC Headquarters

Vandy Miller, OSP Richard Blanton, OSP Michael Lamastra, NMSS

Region I

Bill Kane John McGrath Frank Costello

Maryland

Lawrence Ward, Director Office of Toxics, Environmental Science and Health Roland Fletcher, Administrator Radiological Health Program Neil Quinter, Assistant Attorney General Tom Ferguson Charles Flynn Alan Jacobson Ray Manley

The purpose of the meeting was to discuss the attached memorandum from Bill Kane to Carlton Kammerer and Richard Cunningham dated June 25, 1992, pertaining to NPI issues and to seek from the State whether they would be desirous of any technical assistance from NRC in addressing any unsolved issues.

After a lengthy discussion, both at the management and the staff levels, the State listed the following three areas where they need technical assistance:

1. Offsite contamination

2. Low-level waste storage and disposal

3 Decommissioning and financial assurance

Carlton Kammerer

The State plans to do a team assessment of NPI and will be sending a letter to State Programs in the next few days requesting the above technical assistance. Theyare desirous of handling the NPI issues on an priority basis.

The meeting was very successful. This was another example of the continuing effort of working together in a partnership arrangement on matters of mutual interest.

Attachment: As stated AUG 6 192 13:57 FROM RADIOLOGICAL HEALTH



STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT 2500 Broening Highway Baltimore, Maryland 21224 (301) 631-

William Donald Schaefer Governor Robert Perciasepe Secretary

August 6, 1992

Mr. John McGrath Regional State Liaison Officer United States Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia PA 19406

#### RE: Request for Technical Assistance

Dear Mr. McGrath:

This letter refers to the August 4, 1992 meeting between the Maryland Department of the Environment (MDE) and the United States Nuclear Regulatory Commission (USNRC) regarding USNRC radiation safety concerns about Neutron Products Inc. (NPI). As a result of these discussions, it was determined that our two agencies would work together under a team concept to identify solutions to radiation safety concerns at NPI. It was further determined that, upon a written request by MDE, the USNRC could provide technical assistance in the following areas:

- A. Uncontrolled release of cobalt-60 from the NPI facility.
- B. Radioactive material waste management practices at NPI.
- C. Decommissioning of NPI.

The Radiological Health Programs's (RHP) concerns regarding the uncontrolled release of Co-60 at NPI are listed below:

- 1. What is the pathway(s) of uncontrolled release of Co-60 from the NPI facility which has resulted in the ongoing windborne deposition of radioactive particles into the Dickerson, Maryland community?
- 2. What is the maximum radioactivity that can be released by the above pathway?
- 3. How long has the release been occurring?
- 4. What is a reasonable estimation as to the total or yearly inventory of radioactivity that is being released by the above pathway?

5. What is the potential dispersion radius for these particles around the NPI facility?

# AUG 06 '92 15:59 NRC /ING OF PRUSSIA-2

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#### ' AUG 6 '92 13:58 FROM RADIOLOGICAL HEALTH

Mr. John McGrath August 6, 1992 Page Two

- 6. What are the potential health risks associated with the unrestricted dispersion of these particles?
- 7. Once the above pathway has been identified, what engineering and/or procedural remedial actions should NPI implement?

The RHP's concerns regarding radioactive material waste practices are listed below:

- 1. Are current radioactive waste practices and procedures at NPI adequate to assure radiation safety?
- 2. Can better radiation safety procedures dealing with the removal of hot waste be implemented during the hot cell cleanup following a NPI melt?
- 3. Is the present NPI radioactive material waste storage facility adequate to protect the general public and NPI employees?
- 4. Are NPI procedures for radioactive material waste shipments adequate?
- 5. What is the potential of radioactive material release relevant to a fire in the waste storage area?
- 6. Can a definition be reached on what is radioactive material waste at NPI, and what the current inventory of that waste is?

The RHP's concerns regarding the decommissioning of NPI are as follows:

1. What is the cost estimate for a decommissioning of NPI?

The RHP staff greatly appreciates your time, consideration, and expertise of the above matters. Should you have any questions regarding this letter, please contact Mr. Raymond Manley or me at (410) 631-3301, and we will be pleased to discuss them with you.

Sincerely,

G. Fletcher, Administrator Radiological Health Program

RGF/REM/dpn

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

Carlton Kammerer, Director original signed by Carlton Kammerer FROM: Office of State Programs

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Distribution:

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VMiller

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Kattly E. You may want to FU with I McGrath about NPI - 1 don't think Region I plans anything intel MD submits à letter requesting arristance as discussed at the meeting on \$14 -1 will call Tues AM. Duk

Next (Read); 2 Delete; 3 Save; 4 Info; 5 Pre ;; 6 Forward; 7 Reply; ySheldon A. Schw 08/13 15:56 SUPPORT TO MARYLAND -Forwarded

ite: Thursday, August 13, 1992 3:33 pm ibject: SUPPORT TO MARYLAND

IRNERO CALLED ME SAYING THAT HE HAD JUST BEEN INFORMED OF THE IREEMENT WITH MARYLAND TO HAVE NRC DO NUMERIOUS SAFETY IALUATIONS AT THE REQUEST OF THE STATE OF MARYLAND. HE FURTHER IESTIONED THE APPROPRIATENESS OF DOING EVALUATIONS THAT MD IOULD DEMAND THAT THE LICENSEE DO. DID SP EXPECT NMSS TO BE IVOLVED IN THIS EFFORT? IF SO, DID SP COORDINATE THE COMMITMENT TH NMSS AS WELL AS THE APPROPRIATENESS OF THE WORK? HOW DO YOU ID NMSS PLAN THE TECHNICAL ASSISTANCE WORKLOAD? FOR EXAMPLE, IS I PLANNING TO SEND PEOPLE TO VERMONT TO ASSIST IN ELIMINATING IE LICENSE REVIEW BACKLOG, ESP IN LIGHT OF THE EXISTING BACKLOG I REGION 1?

#### : SRR, NKS, SAS, GCP

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