



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

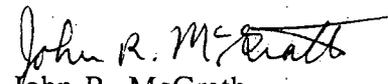
April 3, 1992

**MEMORANDUM FOR:** Vandy L. Miller, Assistant Director for  
State Agreements Program

**FROM:** John R. McGrath  
Regional State Agreements Officer

**SUBJECT:** NEUTRON PRODUCTS, INC. ISSUES

As per our conference call of April 1, enclosed is a listing of issues which Region I believes should be addressed in discussions with the State. Please forward to NMSS for their review for our next conference call scheduled for April 14.

  
John R. McGrath  
Regional State Agreements Officer

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## NEUTRON PRODUCTS ISSUES

Phase II issues/concerns for discussion between NRC and Maryland staff.

### ● IN-PLANT HEALTH PHYSICS ISSUES

#### ● personnel contamination issue

Personnel have, in the past, left the LAA with contamination on their clothing tracking contamination to unrestricted areas. Has the installation of the portal monitor solved this problem?

#### ● adequacy of instrument calibrations

Calibration techniques for instrumentation used in the evaluation of personnel exposures have been questionable. Has this been assessed by NPI?

#### ● cobalt melt issues

Melt operations, particularly clean-up, involve high personnel exposures and possibly environmental releases. The State has required more detailed procedures and monitoring of this operation. Are there any additional requirements needed to address this concern?

#### ● security issue

Access to the LAA via the courtyard area has never been locked. Has NPI provided the necessary security over this area?

#### ● plant contamination/housekeeping issues

LAA has been found to be littered with scrap, tools and other items, some of which have had high levels of contamination. Has NPI implemented a housekeeping program to help keep doses to employees ALARA?

#### ● sump clean-up

Soil contamination was found beneath the floor of a former restroom. NPI has removed some contaminated soil, but the issue has not been closed out. What additional decontamination is required?

### ● OFF-SITE CONTAMINATION ISSUES

#### ● soil contamination of dry pond area

Runoff from the roof and courtyard etc. has contaminated a dry pond and drainage from that area offsite. Has NPI removed all of the contaminated soil required by the State, and has NPI addressed the source of the contamination?

#### ● hot-spot contamination of nearby residences

Contamination, possibly hot particles, have been found on adjacent residences. Has the source of the contamination been determined and has the problem been addressed?

#### ● adequacy of effluent monitoring

The evaluation of effluents from the hot cell have been questionable. Is the current monitoring technique adequate?

- radioactivity in routine sewage

The level of radioactivity in sewer discharge (e.g. from personnel shower runoff) for NPI has, as far as we know, not been determined. What surveys need to be made to determine compliance with sewer disposal limits?

- POOL WATER ISSUES

- pool contamination

There remain leaking sources in the bottom of the main pool. Should NPI be required to dispose of these sources?

- water quality

In addition to the radioactivity, questions exist concerning the level of metal oxidizing microorganisms in the pool and other water quality concerns (Ph, conductivity). Has NPI completed the modifications to the water treatment system as suggested during the NRC inspection in January 1992? What other actions need to be taken to address pool water quality?

- WASTE ACCUMULATION ISSUES

- courtyard waste area

A large volume of uncharacterized waste is currently stored in a building off the courtyard. Should NPI be required to dispose of this waste?

- proposal to cover courtyard and store additional waste

The State wants NPI to cover the courtyard (viewed as a possible source of offsite contamination), but if NPI does cover it, they want to use it as additional waste storage area. Should NPI be allowed to store additional waste?

- DECOMMISSIONING ISSUES

- ultimate decommissioning of NPI

What are the costs involved in decommissioning NPI and how are these costs going to be addressed?

- financial assurance requirements

What financial assurance requirement should be placed on NPI?

- bankruptcy issue

NPI is currently in Chapter 11 bankruptcy. What affect does this, or should this, have on the implementation of financial assurance requirements and the imposition of civil penalties?

DRAFT