



MARYLAND DEPARTMENT OF THE ENVIRONMENT
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William Donald Schaefer
Governor

David A.C. Carroll
Secretary

April 4, 1994

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

**RE: Maryland's Strategic Plan for Oversight and Regulatory
Compliance
at Neutron Products Inc. (NPI)**

Dear Mr. Gordon:

The purpose of this letter is to clearly outline the Maryland Department of the Environment/Radiological Health Program's (RHP's) plan of action with respect to continued oversight of all regulatory aspects of radiation safety at NPI. Enclosed please find the following:

- A. RHP's strategic plan for NPI inspection oversight, and compliance follow-through.
- B. Present status of settlement agreement implementation.
- C. A plan of action for license renewal.
- D. A brief compliance/enforcement history (1986 to present).

Should you have any questions concerning this letter, please contact Messrs. Raymond Manley, Carl Trump, Jr., or me, at (410) 631-3301, and we will be pleased to discuss them with you.

Sincerely,

Roland G. Fletcher, Administrator
Radiological Health Program

RGF/REM/haw
Enclosures

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A. STRATEGIC PLAN

1. Inspection: The Agency will endeavor to conduct inspections at NPI at a quarterly frequency. The next inspection of the license is tentatively scheduled during the week of April 18, 1994. The inspection will encompass an inspector review of NPI compliance with the January, 1994 settlement agreement, license amendments (specifically amendment #33), concerns determined as a result of the October, 1993 MDE/NRC evaluation of off-site release, and Radiation Safety Officer administrative oversight of the license. Subsequent inspections, in addition to inspector review of ongoing compliance status, will target specific areas within the licensee's program. These areas will include, but not be limited to, quality assurance of manufacturing of sealed sources, radioactive material waste management, licensee evaluation of off-site releases, health physics practices during melting campaigns, review of radiation work permits, D.O.T. compliance, and main pool storage of sealed sources. All inspections will emphasize NPI's need to comply with radiation safety as outlined in NRC's new Part 20 and as reflected by RHP's new Section D.
2. Interagency Cooperation: It is realized that in order for there to be solutions to current and future concerns at NPI there will need to be cooperative interchange, not only between the licensing and inspection sections within RHP, but also between RHP and Hazardous Waste Management, Air Management, and the Attorney Generals Office.
3. NPI Planning Committee: The establishment of a committee composed of MDE staff to meet at least quarterly to discuss NPI concerns in the areas of inspection, licensing, and oversight of licensee implementation of submitted plans and corrective actions.
4. Settlement Goals: The completion of licensee requirements as outlined in the January, 1994 NPI/MDE settlement agreement should address the following areas of concern:
 - a. Radiation dose to the general public. The construction of the temporary radioactive material waste area followed by the construction of the interim radioactive material waste storage facility should incorporate the use of radiation shielding. This shielding should significantly reduce the radiation dose from the facility, and hopefully insure NPI's compliance with dose to members of the general public.
 - b. NPI compliance with regulatory requirements to evaluate release of radioactive material effluents into unrestricted areas and to maintain those releases from the facility to as low as reasonably achievable. The construction of the courtyard enclosure will cover potential radioactive material facility airborne and waterborne release points from the

facility hotcell/pool area and present radioactive material storage areas. The potential for this release was clearly identified during the October, 1994 MDE/NRC evaluation. This enclosure should significantly reduce NPI's release of airborne and waterborne radioactive material to the environment and assist the licensee in maintaining better control over licensed materials for unrestricted effluent evaluations.

- c. NPI cleanup of contaminated soils both on its facility and on surrounding railroad property. The removal of contaminated soils from around the facility and on adjacent railroad property should lower radiation dose to the surrounding area and decrease the potential for migration of licensed material.
- d. The restriction of the general public to contaminated soils on NPI property. The construction of a fence around contaminated soils should assist in restricting access to contaminated soil by the public.

B. PRESENT STATUS OF JANUARY, 1994 SETTLEMENT

1. Two health physicists have been chosen by MDE. Thus far, neither has agreed to work for NPI under the agreement conditions, especially the signing of a secrecy agreement between that consultant and NPI. MDE may return to court pending the outcome of this issue.
2. An NPI application for scope of settlement construction has been submitted to the County and MDE for review, the MDE review is complete and NPI is waiting for the completion of the County's review.
3. Since County review and approval is required prior to construction of the dry pond fence and settlement pool, NPI's construction deadline of March 1, 1994 has been extended for sixty days.
4. MDE management met with NPI management on February 2, 1994 to discuss implementation of the settlement agreement.
5. On March 1, 1994, NPI paid their first \$20,000 installment of the settlement money.
6. The NPI plan for the temporary radioactive material storage building was due March 30, 1994. Due date extended to March 31, 1994. The licensee's plan was received by RHP on March 31, 1994.

C. LICENSE RENEWAL

1. The RHP appointed a committee composed of inspection and licensing staff to reevaluate and issue the NPI renewal license. Completion of the license was delayed pending the outcome of the judicial action. Further revisions are now being made. NPI has stated that a new renewal application is being prepared.
2. Options for review:
 - a. A reorganization of the license package which was completed by RHP and submitted to the Attorney Generals Office three years ago. The difficulty in this approach is that there have been significant changes in the NPI program in this interim period resulting from implementation of Agency Orders and the Settlement Agreement. Further, the licensee has updated numerous procedures during the previous three years. The license was largely modified by the Agency and will likely be contested by the licensee. The estimated staff time for this method renewal is six months.
 - b. A complete reapplication for license by NPI. The last application was submitted in 1984. This method would attempt cooperation with the licensee to reissue the license. The estimated staff time for completion cannot be arrived at pursuant to past experience with the licensee failing to respond to Agency requests for licensing information. During a February, 1994 meeting between NPI and MDE, the licensee's president indicated his intent to resubmit the license application in it's entirety. No such application has yet been received. It is the intention of the Agency to send NPI a letter of reminder with a specified timetable of submittal. Should NPI fail to submit the application within the time schedule allowed, they will be informed that licensing option a. will be pursued thereby indicating the Agency's willingness to mandate the license in it's entirety.
 - c. Option a. listed above, with NPI resubmitting all current procedures and employee work permits for review. This option could be conducted concurrent with RHP meeting with NPI technical staff for clarification and compliance with regulations, license, and good health physics practices.
3. All of the above options may have available concurrent review by NRC technical staff.

D. BRIEF COMPLIANCE/ENFORCEMENT HISTORY

ENFORCEMENT ACTION	SUMMARY
July, 1986 Agency Order	Loss of control of DU and contamination of facility
July, 1986 Agency Order	Overexposure of employee due to insufficient training
June, 1988 Agency Order	Personnel, vehicle, and home contamination
March-July, 1989 Emergency Shutdown of Licensed Operations	Failure of license to control off-site release of radioactive material
May, 1989 License Modification	Fifteen-item modification addressing wide range of radiation safety program deficiencies
July, 1989 MDE/NPI Departmental Hearing	NPI challenge of modification
October, 1989 Agency Order	Addressed programmatic changes to licensee's respiratory protection program
June, 1991 Agency Suit Filed Against NPI in Montgomery County, Maryland	Failure of licensee to timely implement 1989 license modifications and other associated violations
May, 1992 Amended Complaint Filed Against NPI in Montgomery County, Maryland	Update of complaint to include additional identified areas of noncompliance (24 counts)
December 1993 Memorandum Opinion and Order	Preliminary judgement by Montgomery County on 17 of the 24 counts. NPI judged liable for 5,820 violations.
January, 1994 Stipulation and Settlement Agreement between MDE and NPI	Settlement of above complaint
1986 to 1994 Number of Agency Inspections and Approximate Number of Violations	fourteen Agency inspections with approximately 100 violations identified
1986 to 1994 Agency Investigations	seventeen Agency investigations or special surveys
Fines and Settlement Agreement Monies	\$78,000