



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY

BUREAU OF RADIATION PROTECTION

~~XXXXXXXXXXXX~~ TRENTON, N. J. ~~XXXX~~
CN 411 08625

June 13, 1986

Mr. Steven Horn
Acting Chief, Safety Office
Department of the Army
Headquarters, US Army Communications-
Electronics Command and Fort Monmouth
Fort Monmouth, New Jersey 07703-5000

Dear Mr. Horn:

Attached is our review of the two reports you sent to Mr. Soboleski, Federal Facilities Coordinator for the New Jersey Department of Environmental Protection. We appreciate the opportunity for early review of these documents. It is our understanding that you intend to submit these reports to the U. S. Nuclear Regulatory Commission as part of your request to terminate the NRC license for the neutron generator facility. I believe you will find some of our comments useful in your preparation of information to the NRC.

As indicated in the attached review, DEP will withhold final evaluation on the determination of whether or not this facility can be returned to unrestricted use by the general public. Concurrent with the activities of the NRC, DEP will review and evaluate data and information you submit to the NRC.

When you are prepared to initiate the request to the NRC to terminate your license, please provide us, through Mr. Robert Soboleski, the DEP Federal Facilities Coordinator, 428 East State Street, Carroll Building, Trenton, NJ 08625, the information you send to the NRC.

If there are any questions please do not hesitate to contact me.

Sincerely yours,

Gerald P. Nicholls
Acting Bureau Chief

GPN:dag

Attachment

c: R. Soboleski, DEP/Federal Facilities Coordinator

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380 SCOTCH ROAD, TRENTON, N. J. 08629

MEMORANDUM

TO: Gerald P. Nicholls, Ph.D., Acting Bureau Chief

FROM: Jeanette Eng, Supervisor
REAS *Jeanette Eng*

RE: Review of Fort Monmouth Documents on a Former Neutron Generator Facility at Sandy Hook, NJ

DATE: June 11, 1986

I have reviewed the Radiation Protection Study No. 28-43-0032 entitled "Residual Radioactivity Contamination Levels in the Decommissioned Neutron Generator Facility Sandy Hook, NJ, 12 December 1985 - 31 January 1986" and a Memorandum of Record dated 9 May 1986 entitled "Wipe Testing of Neutron Generator Facility, Fort Hancock". Both documents were generated by the Department of Army. These documents were provided to BRP by HSMA.

Not contained in these two documents is the history of operation and decontamination efforts previous to December of 1985. These are necessary to determine the degree of contamination as a result of routine and non-routine operations, and to determine whether reasonable efforts have been made to achieve decontamination and decommissioning. Also, what efforts and procedures were used to reduce the surface contamination levels?

Concerning the report of work done in December 1985 - January 1986 itself, it is difficult for me to understand why elevated tritium levels of about 1,000 dpm/100cm² are found on Wall G of the control room and on Wall D next to the fresh air intake in the neutron generator room unless the overall facility was contaminated to this degree during the normal operations. This report contains extensive data on wipes to demonstrate compliance with removable contamination. Not available are the measurements to determine compliance of total or fixed surface contamination.

It appears that the second report is the final wipe survey done 30 April - 6 May 1986 of the building after numerous decontamination efforts have been

performed. Based on the wipe survey on all walls and floors, it appears that the building will meet decontamination and decommissioning criteria for removable contamination. The majority of the elevated levels were in the neutron generator room towards the southern portion of the room. The wall contamination was evident near the former outtake ventilation area. Maximum removable contamination was 541.32 dpm/100cm². The majority of wipes were less than 50 dpm/100cm² of removable contamination. However, not contained in this report are readings of fixed, non-removable or total surface contamination. NRC criteria contains limits for total, maximum, and removable surface contamination limits of 5,000 15,000 and 1,000 dpm/100cm², respectively.

Since it appears to be the intention of the Department of Army to submit information to the U. S. Nuclear Regulatory Commission (NRC) for a decision on license termination, it would be prudent to withhold final decision on the adequacy of the decommissioning until the NRC has judged that the site is no longer under license.

Inconcert, DEP can then make the final decision on approving the site for unrestricted use. In discussion with Mr. Kinneman of the NRC, it appears that if satisfactorily completed application as per 10 CFR 30 is received from the licensee concerning the request for license termination, Mr. Kinneman will have an NRC inspector visit the facility sometime in the summer prior to any NRC decision on license termination.

Although it appears from the report on wipe survey performed on 30 April - 6 May 1986 by the U. S. Department of Army that the facility has been decontaminated to meet the criterion for removable surface tritium contamination; since there are a number of items which need response such as summary of operating history and any unusual events, documentation of decontamination efforts, documentation of compliance with criterion for total surface contamination, intended future use of building and ground, and the NRC's license termination process, I recommend that DEP withhold final approval at this time in order to coordinate with the NRC actions to occur at the end of the summer.

This review is based solely on the review of the above-mentioned documents. If other documents are available and provided, REAS will review and consider the need to revise the above recommendation.

JE:dag

c: J. Kinneman, USNRC-Region I