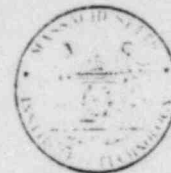


H. Bernard



NUCLEAR REACTOR LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY



100 Albany Street, Cambridge, Mass. 02139
617-253-4202

May 14, 1981

Mr. James R. Miller, Chief
Standardization and Special Projects Branch
Division of Licensing
Nuclear Regulatory Commission
Washington, D. C. 20555



Subject: Request for Waiver of Effluent Limitation,
License No. R-37, Docket 50-20

Dear Mr. Miller:

Massachusetts Institute of Technology requests a waiver from the effluent limitation imposed by MIT Research Reactor Technical Specification 3.8-1(a), which states that "The release of radioactive effluents from the reactor site will comply with all provisions of Part 20, Title 10, Code of Federal Regulations, with the following exemptions: (a) with exception of tritium from the reactor secondary coolant system, the annual total quantity of radioactive material released to the sanitary sewer shall not exceed one curie."

Discharges to the sanitary sewer for ten and one-half months to date total 0.015 curies, including tritium. It is our wish to discharge to the facility waste tanks and thence to the sanitary sewer all water in the spent fuel storage pool. This amounts to approximately 7315 gallons containing 1.136 Ci of tritium, 0.004 Ci of Co-60 and 0.001 Ci of Zn-65. This would make the total discharge 1.156 Ci, which slightly exceeds the Technical Specification 1 Ci limit.

The reason for emptying the storage pool is to permit repainting. This must be done as soon as possible, preferably Friday or Saturday, May 15 or 16, in order to provide time for cleaning, painting, drying and refilling before the transfer of spent fuel to the pool in June.

Justifications for the waiver are the following:

- 1) Specification 3.8-1(a) was written to comply with 10CFR20.303(d) as it existed in 1975. Recently the 1 Ci limit in that paragraph has been changed to allow 5 Ci of tritium.
- 2) The discharge of tritium to the sanitary sewer from the cooling towers as opposed to other sources is limited by a specification (3.8-1(b)) based on concentration, because it was recognized that the discharge might exceed 1 Ci per year from the towers. It was expected that it would not exceed 1 Ci per year from other sources.

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Mr. James R. Miller, Chief

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- 3) The MIT Reactor reporting year ends June 30th. If part of the storage pool could be discharged after June 30th (or if some of the tritium could be charged against the 1 Ci allowed for the year starting next July 1st), we would not anticipate any problems in complying with the Technical Specifications over the two year period.

Storage of 1000 gallons in one of the two waste tanks until July 1st can be done, but that does not quite get us below the 1 Ci limit. Using both waste tanks for that purpose would do it but would be unwise from our operational viewpoint.

Your assistance in providing expeditious relief from what appears to be a simple technicality will be most appreciated. Our reason for not seeking relief earlier was a misinterpretation of the discharge limitation arising from the recent change in 10CFR20.303(d).

Please call if additional information should be required.

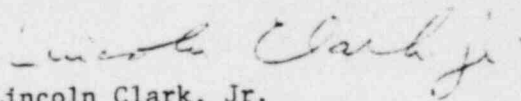
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Sincerely,


Lincoln Clark, Jr.

LC/sbs