

The University of Iowa

Iowa City, Iowa 52242

Radiation Protection Office
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25 March 1980



8005080 658

U.S. Nuclear Regulatory Commission
Attn: James G. Keppler, Director
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

This is in regard to license number 14-02938-02 and license number 14-0822-01 as requested by your inspectors during their visit of February 26-29, 1980. This is a second reply to I & E Bulletin 79-19 entitled Packaging of Low-Level Radioactive Waste for Transport and Burial and should be considered as a reply for both The University's license number 14-02938-07 and the Iowa City VA Hospital license number 14-0822-01.

The University of Iowa's Radiation Protection Office supplies certain services to the Iowa City VA Hospital. The collection and packaging for transport of low-level radioactive waste generated at the VA Hospital is among the services supplied. The University's initial response to I & E Bulletin 79-19 provided information for their total program and it did not differentiate between the institutions, The University of Iowa license number 14-02938-07 and the VA Hospital license number 14-0822-01.

The low-level radioactive waste program described in the following replies to the items 1 - 9 of Bulletin 79-19 and applies to both licenses. The values provided in response to items 9-a and 9-b below are based on low-level radioactive waste collection records and, as per request of your inspectors, are broken down by license number.

1. The University maintains a set of pertinent DOT & NRC regulations concerning the transfer, packaging and transport of low-level radioactive waste material.
2. The University uses a waste collection contractor and copies of the contractor's current requirements are maintained.
3. The Radiation Protection Office collects and packages the low-level radioactive waste material at The University and the VA Hospital. One individual has been designated as responsible for the collection and packaging of low-level radioactive waste.

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4. Packaging for transport requirements used by the collection contractor are provided waste collection personnel. In addition, internal collection procedures are also provided to waste generators and collection personnel.

5. Radiation Protection Office personnel involved in collection, transfer and packaging for transport of low-level radioactive waste are provided information which is discussed in RPO information meetings. A record of dates, attendees and subject materials is maintained. A copy of the record format was provided your inspector.

6. Training and re-training of radiation workers who generate radioactive waste is provided by special topic information memos. These memos have stressed proper classification as to physical and chemical form, minimization of volume of all radioactive waste and the importance of segregation at the point of origin. Copies of recent such memos were provided your inspector.

7. A management controlled audit function has been implemented; it includes review of collection and packaging processes and logistic problems, implementation of frequent changes initiated by ultimate disposal site management, collection and shipment reviews and summaries.

8. This management controlled audit function is an ongoing activity. Records are maintained on a monthly basis. Such records were made available for the review of your inspector during the last inspection.

9. We plan to continue our established program regarding the above items which we feel fulfills the requirements.

- a. Between January 1978 and July 1, 1979, The University of Iowa made twenty three shipments of low-level radioactive waste. All low-level radioactive waste from the VA Hospital located in Iowa City (NRC Lic. #14-0822-01) was consolidated with and included in each of the twenty three University shipments.

The volumes per facility were approximately those indicated below:

The University of Iowa	-	5612.1 cubic feet
The Iowa City VA Hospital	-	1403.1 cubic feet

- b. The quantities of low-level radioactive waste shipped per institution during the period of concern were as follows:

The University of Iowa	-	3.037 curies
The Iowa City VA Hospital	-	.759 curies

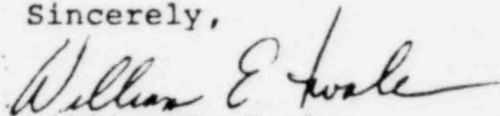
The major isotopes included in all of the low-level radioactive waste were tritium, phosphorus-32 and iodine-125.

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- c. During the period of concern both institutions (The University of Iowa and the Iowa City VA Hospital) did generate liquid low-level radioactive waste. The solidification process used were in accord with waste collection contractor's instructions primarily in DOT Spec, 55 and 30 gallon drums with the required quantity of vermiculite.

Sincerely,



William E. Twaler
Director
Radiation Protection Office

GTL:bam

cc: NRC Office of Inspection
and Enforcement
Division of Fuel Facility
and Material Safety Inspection
Washington, D. C. 20555

Richard Peterson, M. D.
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