



OSEH
Occupational Safety &
Environmental Health

PUBLIC
University of Michigan
Occupational Safety & Environmental Health
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Phone: 313 647-1143 • Fax: 313 763-1185

Henry D. Baier, Director

030-01988

October 14, 1996

Nuclear Materials Licensing Section
U.S. Nuclear Regulatory Commission, region III
801 Warrenville Road
Lisle, Illinois 60532-4351

*sent to
mcom
10-23-96*

RE: **Notification Under the Timeliness Rule (10 CFR 30.36)**

Licensing Section:

In accordance with 10 CFR 30.36, this correspondence serves as written notification to the Nuclear Regulatory Commission (NRC) that the University of Michigan (U-M) has identified five possible areas under the U-M Byproduct Material License (21-00215-04) where no principal activities involving the use of byproduct material have been conducted in a separate building or outdoor area for 24 months.

The five possible areas or facilities include the following:

1.0 University of Michigan Landfill

Between May 26, 1964 and September 24, 1971, the U-M conducted a total of 29 individual burials of pathological material in the U-M landfill [NW(1/4) of the NE(1/4) of Section 27 / Ann Arbor Township / Washtenaw County / Between Glazier Way Road and Geddes Road] in accordance with 10 CFR 20.304.

Between March 1994 and September 1994, historical information, radionuclide disposal data, and radiological survey results were provided to the NRC upon request.

In a correspondence dated September 30, 1994 (Attachment #1), NRC Nuclear Materials Safety Branch Chief Roy J. Caniano responded to a request by the Michigan Department of Public Health (MDPH) - Licensing & Registration Section Chief David W. Minnaar regarding the NRC's review and evaluation of the potential radiological risks concerning the former U-M radioactive waste burial site.

As noted in the correspondence, both Mr. Caniano and Mr. Minnaar conclude that the majority of the radionuclides buried in the landfill have decayed to immeasurable levels and do not pose a hazard even if the area is disturbed. In addition, Mr. Caniano noted that the NRC also concluded that the small quantities of tritium (H-3 / 0.56 millicuries) and carbon-14 (C-14 / 1.8 millicuries) buried in the landfill between May 1964 and September 1971 do not present a hazard or health and safety risk.

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The NRC concluded that they did not believe the that expense of core boring and analysis is warranted for the U-M landfill.

It should also be noted that during the May 6-10, 1996 comprehensive NRC inspection, Nuclear Materials Inspection (Branch 2) Chief Monte P. Phillips mentioned that the U-M landfill situation had apparently already been adequately addressed and would not likely be considered with respect to the decommissioning timeliness rule.

2.0 BioQuant, Inc.

As noted in an amendment to the U-M Byproduct Material License (21-00215-04) dated June 8, 1994 (Attachment #2), the U-M removed BioQuant, Inc. from the license. The NRC officially removed BioQuant, Inc. from the U-M license (Condition 10) in Amendment No. 74 dated July 14, 1994.

The BioQuant, Inc. facility was officially decommissioned by the U-M Radiation Safety Service health physics staff in late May 1994. No contamination was identified to have remained at the BioQuant, Inc. facility located at 1919 Green Road, Ann Arbor, MI after the comprehensive decommissioning effort by Radiation Safety Service personnel. Radiation Safety Service / OSEH maintains documentation of this decommissioning effort.

3.0 Willow Run (Beck Road) Facilities / Belleville, Michigan

Building #2226 at the U-M Willow Run Facilities was used in the 1980's to store low-level radioactive liquid wastes. The liquids were stored in 4-liter plastic jugs and placed into appropriately sealed and labeled cardboard storage boxes.

The liquid wastes were properly disposed of in 1992 and the small storage building located at the front portion of the fenced-in Willow Run Facilities was officially decommissioned by the U-M Radiation Safety Officer and a RSS Health Physicist on August 6, 1992. Refer to Attachment #3 for documentation of the decommissioning effort.

4.0 U-M Sheep Research Facility / 2615 Gale Road / Ann Arbor, MI

Animal studies involving short-lived iodine-125 (half-life: 60 days) were conducted for a short period of time in the mid-1980's at the U-M Sheep Research Facility located at 2615 Gale Road, Ann Arbor, Michigan. The animal studies ended in approximately 1984.

Although there is nothing to indicate the current presence of any remaining residual radioactivity, U-M Radiation Safety Service / OSEH personnel will evaluate the U-M Sheep Research Facility to confirm that no remaining residual activity is present.

5.0 West Engineering Building / 550 East University Avenue / Ann Arbor, MI

Research work involving radioactive materials had been conducted historically in the U-M West Hall (formerly the West Engineering Building) located at 550 East University Avenue, Ann Arbor, Michigan 48109-1092 primarily during the 1960's.

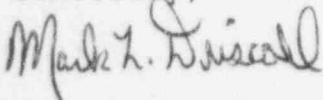
October 14, 1996

Although there is nothing to indicate the current presence of any remaining residual radioactivity, U-M Radiation Safety Service / OSEH personnel will evaluate the West Hall (West Engineering) Building to confirm that no remaining residual radioactivity is present.

We hope the information provided in this correspondence adequately addresses the notification requirement of 10 CFR 30.36. The University of Michigan has attempted to respond completely and accurately to the notification requirement.

Please do not hesitate to contact me at Radiation Safety Service / OSEH [(313) 764-4420] should you have any questions, comments, or concerns regarding the locations specified in this correspondence. Thank you for your time and consideration.

Sincerely,



Mark L. Driscoll
Director / Radiation Safety Officer
Radiation Safety Service

MLD/DAP/mld
NRC1096

cc: Henry D. Baier, Director, OSEH
James E. Carey, Chair, Radiation Policy Committee
Paul A. Spradlin, Interim Associate VP, Business Operations



UNITED STATES
NUCLEAR REGULATORY COMMISSION

ATTACHMENT #1

REGION III
801 WARRENVILLE ROAD
Lisle, Illinois 60532-4351

September 30, 1994

Michigan Department of Public Health
Division of Radiological Health
ATTN: David W. Minnaar, Chief
Licensing and Registration
Section
3423 North Logan/Martin L. King Blvd.
Lansing, MI 48909

Dear Mr. Minnaar:

This letter is in response to your request that we review our records and evaluate the potential radiological risks concerning the remediation of a former radioactive waste burial site at the University of Michigan.

We have searched our records and find no additional information to augment what you provided to us. We concur with your conclusion that the majority of the radionuclides buried in the site have decayed to immeasurable levels and do not pose a hazard even if the area is disturbed.

In addition, we have also concluded that the University's records clearly indicate that a small amount of carbon-14 (C-14) and hydrogen-3 (H-3) was buried. Notwithstanding the statements from the former radiation safety officer that the records are inaccurate and neither of those long lived radionuclides were buried, the small quantities of C-14 and H-3 do not represent a hazard.

If the maximum quantity of carbon-14 was 1.8 millicuries and the maximum amount of hydrogen-3 was 0.56 millicuries as indicated in the records, these would not pose a radiological hazard even if the site were disturbed. 10 CFR 30.71, Schedule B lists the exempt quantity of hydrogen-3 as 1 millicurie. This amount could be possessed by any individual without a license. Even though the amount of carbon-14 does exceed the exempt quantity (0.100 millicuries), we do not believe that under the circumstance of handling the material as soil contamination during site remediation would result in any health and safety risk.

The university has performed surface and well water radiological surveys, but we believe that the only way to truly analyze the contamination of the area is to perform core boring. However, based on the information available in the records and the low radiological hazard associated with the worst case scenario, we do not believe that the expense of core boring and analysis is warranted.

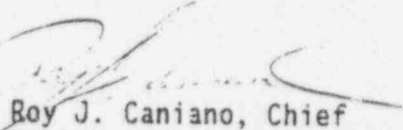
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David W. Minnaar

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If you have any other questions, please do not hesitate to contact Jack Grobe at (708)829-9837.

Sincerely,



Roy J. Caniano, Chief
Nuclear Materials Safety Branch

cc: John Glenn, NMSS
Mark Driscoll, Univ. of MI