

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED: University of Minnesota W-166 Boynton Health Service 410 Church Street SE Minneapolis, MN 55455 REPORT NUMBER(S) 2016001		2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S) 030-00842	4. LICENSE NUMBER(S) 22-00187-46	5. DATE(S) OF INSPECTION August 10 and 12, 2016	

**LICENSEE:**

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

\_\_\_\_\_ Non-cited violation(s) were discussed involving the following requirement(s):

- 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
(Violations and Corrective Actions)

**Statement of Corrective Actions**

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE	DATE
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Ryan Craffey	<i>Ryan Craffey</i>	8/23/16
BRANCH CHIEF	Aaron McCraw	<i>AM</i> for ATM	8/24/16



**Docket File Information**

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  University of Minnesota W-166 Boynton Health Service 410 Church Street SE Minneapolis, MN 55455  REPORT NUMBER(S) 2016001	2. NRC/REGIONAL OFFICE  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
---	---

3. DOCKET NUMBER(S)  030-00842	4. LICENSE NUMBER(S)  22-00187-46	5. DATE(S) OF INSPECTION  August 10 and 12, 2016
--------------------------------------	---	--

6. INSPECTION PROCEDURES USED  87126	7. INSPECTION FOCUS AREAS  All
--	--------------------------------------

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)  03620	2. PRIORITY  5	3. LICENSEE CONTACT  Brian Vetter - RSO	4. TELEPHONE NUMBER  (612) 626-5247
---------------------------------	----------------------	---	---

Main Office Inspection      Next Inspection Date: 08/10/2021  
 Field Office Inspection    2205 East 5th Street, Duluth, MN  
 Temporary Job Site Inspection 901 Minnesota Avenue, Duluth, MN

**PROGRAM SCOPE**

This was an unannounced routine inspection of 50,000-student public research university authorized to use portable gauges at temporary job sites in NRC jurisdiction, and to use byproduct material for research and development aboard research vessels in waters where the NRC maintains jurisdiction. At the time of the inspection, the university had not used portable gauges in NRC jurisdiction since before the last inspection, but did routinely conduct algae metabolism studies in NRC jurisdiction on Lake Superior using C-14 radiolabeled compounds on one or more of up to five cruises each summer. The exact locations of these studies varied, but typically included State of Michigan waters. The investigators authorized to perform this work were based at the university's Duluth campus, and used a mobile laboratory loaded onto the Research Vessel Blue Heron (the licensee had not worked aboard the other three vessels since before the last inspection), which docked at the US Army Corps of Engineers vessel yard in Duluth. The mobile laboratory was stored at this yard when not in use. Radioactive material was received, and waste returned, to the Duluth campus; none was stored aboard the ship or at the USACE yard between cruises. The licensee's radiation safety staff were based at the university's main campus in Minneapolis, and performed audits of these activities twice a year as part of the university's broad-scope radiation safety program.

PERFORMANCE OBSERVATIONS: On August 10, 2016, the inspector interviewed the university's radiation staff at the main campus in Minneapolis, and discussed the scope and oversight of licensed activities. The inspector reviewed protocols and permits for licensed activities, as well as initial and refresher training for investigators and radioactive materials users. The inspector also reviewed a selection of audits for investigators who performed activities under this license. On August 12, 2016, the inspector interviewed staff involved with these activities at the Large Lakes Observatory in Duluth, and discussed the receipt, use and disposal of radioactive material, area surveys, and incident response, among other topics. The inspector also reviewed a selection of pre- and post-cruise contamination surveys. The inspector then visited the USACE yard in Duluth, where the Blue Heron had just returned from a cruise in which radioactive material was used. The inspector toured the vessel and mobile laboratory, conducted independent surveys, and interviewed the ship's captain and other staff to discuss the conduct of licensed activities while aboard the vessel.

No violations of significance were identified as a result of this inspection.

*Gw  
for ATM*