

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Ball State University
2000 W. University Ave.
Muncie, IN 47306

REPORT NUMBER(S) 2021-001

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenton Road, Suite 210
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-00700

4. LICENSE NUMBER(S)

13-06231-01

5. DATE(S) OF INSPECTION

3/11-22/2021

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	Robert G. Gattone, Jr.	Robert G. Gattone	Digitally signed by Robert G. Gattone Date: 2021.03.29 09:18:54 -05'00'
BRANCH CHIEF	Michael Kunowski	Michael A. Kunowski	Digitally signed by Michael A. Kunowski Date: 2021.03.29 14:11:59 -05'00'



Materials Inspection Record

1. Licensee Name: Ball State University		2. Docket Number(s): 030-00700		3. License Number(s) 13-06231-01	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: 3/11 - 26/2021		
6. Inspector(s): Robert G. Gattone, Jr.		7. Program Code(s): 87126		8. Priority: 3	9. Inspection Guidance Used: 03.01 - 03.07
10. Licensee Contact Name(s): Larry Fromm, Ph.D., RSO		11. Licensee E-mail Address: Lfromm@BSU.edu		12. Licensee Telephone Number(s): 646-530-2556	
13. Inspection Type: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Non-Routine <input type="checkbox"/> Initial <input type="checkbox"/> Unannounced		14. Locations Inspected: <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input checked="" type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 3/11/2024 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an announced, remote routine inspection of an academic broadscope institution authorized to possess and use millicurie quantities of carbon-14, and isotopes with atomic number 1-83 with half lives less than or equal to 120 days for research and development studies as defined in 10 CFR Part 30. At the time of the inspection, the licensee was using microcurie quantities of carbon-14 and hydrogen-3. The University's Radiation Safety Committee (RSC) approved 4 authorized users to use licensed material in 2 laboratories. The laboratories were located in the Medical Education buildings on campus. The RSC, which met on quarterly basis, was composed of a chairperson and 6 members from various departments in the university.

The inspector: (1) observed photos showing proper calibrated survey meters; (2) observed a photo showing the LSC unit; (3) observed photos showing how the licensee secured the licensee material; (4) observed a lab and there were no issues; (5) observed a photo with an authorized user using proper lab coat, gloves, mask, and safety glasses; (6) observed the licensee's unsealed radioactive material safety rules and no issue; (7) observed records for area surveys done monthly by the RSO and no issues; (8) observed the licensee's emergency procedures for licensed materials and there were no issues; (9) observed records for Radiation Safety Committee meetings and there were no issues; (10) observed records for radioactive waste and no issues; (11) observed records for the annual audit for the radiation safety program from 7/1/2019 - 6/30/2020: conducted lab monitoring; (12) noted routine gamma and high-energy beta surveys performed with a calibrated survey meter, and wipe tests measured with a scintillation counter to monitor the use of low energy beta materials (H-3 and C-14) and these materials are commonly used in biological research on campus; (13) noted that survey meters are calibrated annually and there were no issues; (14) noted users on campus survey their labs on a weekly basis when experiments are in progress, no spills or accidents were reported during the present audit period; (15) noted surface contamination was detected by wipe testing on a fume hood and the fume hood was decontaminated to background by cleaning with detergent - based cleaning solution; (16) observed records for the annual audit radiation safety program for 2017, 2018, 2019, 2020 (10 CFR 20.1101(c)); and (17) observed the licensee's procedure: safety unsealed radioactive materials and there were no issues.