



## Materials Inspection Report

<b>1. Licensee/Location Inspected:</b>  Purdue University 550 Stadium Mall Dr. West Lafayette, Indiana 47907-2051  Report Number(s) 2023001	<b>2. NRC/Regional Office</b>  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
<b>3. Docket Number(s)</b> 040-02681	<b>4. License Number(s)</b> SUD-296	<b>5. Date(s) of Inspection</b> Jul. 11, 2023 - Apr. 18, 2024

**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. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

A. 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, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.  
 (Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/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 AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Geoffrey Warren, Sr. HP	GEOFFREY WARREN <small>Digitally signed by GEOFFREY WARREN Date: 2024.04.30 11:20:35 -05'00'</small>
BRANCH CHIEF	Rhex Edwards	 <small>Digitally signed by RHEX EDWARDS Date: 2024.04.30 12:40:58 -05'00'</small>



### Materials Inspection Record

1. Licensee Name: Purdue University		2. Docket Number(s): 040-02681		3. License Number(s) SUD-296	
4. Report Number(s): 2023001			5. Date(s) of Inspection: July 11, 2023 - April 18, 2024		
6. Inspector(s): Geoffrey Warren, Sr. HP		7. Program Code(s): 11300	8. Priority: 5	9. Inspection Guidance Used: 87126	
10. Licensee Contact Name(s): Joshua A. Young, RSO		11. Licensee E-mail Address: young127@purdue.edu		12. Licensee Telephone Number(s): 765-494-1478	

13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected: <input type="checkbox"/> Hybrid		15. Next Inspection Date (MM/DD/YYYY):	
<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Announced	<input checked="" type="checkbox"/> Main Office	<input type="checkbox"/> Field Office	07/11/2028	
<input type="checkbox"/> Non-Routine	<input checked="" type="checkbox"/> Unannounced	<input type="checkbox"/> Temporary Job Site	<input type="checkbox"/> Remote	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Extended
				<input type="checkbox"/> Reduced	<input type="checkbox"/> No change

16. Location(s) Inspected List:  
Electrical Engineering Building, Purdue University, West Lafayette, IN

17. Scope and Observations:

This was a routine, unannounced inspection of operations performed under the licensee's SUD-296 license. Under this license, Purdue University operated a sub-critical pile. The reactor team, around personnel including students, used the pile for educational and research purposes occasionally. The licensee had disposed of additional materials possessed under the license but had not yet requested removal of these materials from the license.

Performance Observations: The inspector toured and observed security of the facility where the sub-critical pile was maintained. Operators demonstrated how the pile was used in research and education and licensee management described oversight of the program, including laboratory audits. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. Review of radiation dosimetry records indicated no exposures of concern. The inspector performed independent and confirmatory radiation measurements that were consistent with licensee survey records and postings.

Signature and Date - Branch Chief



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Date: 2024.04.30 12:40:24 -05'00'