

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Terre Haute Regional Hospital 3901 S. 7th, St. Terre Haute, IN 47802 REPORT NUMBER(S) 2021-01	2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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3. DOCKET NUMBER(S) 030-09540	4. LICENSE NUMBER(S) 13-09649-02	5. DATE(S) OF INSPECTION 1/7/2021 - 2/11/2021
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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	Edward E. Johnston, III, RSO		
NRC INSPECTOR	Robert G. Gattone, Jr.	Robert G. Gattone	Digitally signed by Robert G. Gattone Date: 2021.02.12 14:10:54 -06'00'
BRANCH CHIEF	Michael Kunowski	Michael A. Kunowski	Digitally signed by Michael A. Kunowski Date: 2021.02.12 16:12:02 -06'00'



Materials Inspection Record

1. Licensee Name: Terre Haute Regional Hospital		2. Docket Number(s): 030-09540		3. License Number(s) 13-09649-02	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: 1/7/2021 - 2/11/2021		
6. Inspector(s): Bob Gattone		7. Program Code(s): 02120	8. Priority: 3	9. Inspection Guidance Used: IP87132	
10. Licensee Contact Name(s): Edward E. Johnston, III		11. Licensee E-mail Address: N/A		12. Licensee Telephone Number(s): (812) 251-6797	
13. Inspection Type:		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input type="checkbox"/> Initial <input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		<input type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input checked="" type="checkbox"/> Remote		01/07/2024 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was a routine remote inspection of a large community hospital authorized under an NRC license to use byproduct materials for medical uses permitted by 10 CFR 35.100, 35.200, 35.300, and 35.400. The nuclear medicine department was staffed with two full time nuclear medicine technologists who performed approximately 160 diagnostic nuclear medicine procedures monthly. The licensee's work hours are 7am - 4pm, Monday through Friday. The licensee retained a consulting physicist who audited the nuclear medicine radiation safety program on a quarterly basis. The licensee received both unit and bulk doses at the nuclear medicine department. The licensee maintained an active Iodine-131 therapy program. Typically in a year, the licensee administered about 201-131 treatments for hyperthyroidism, and approximately 10 ablations. The licensee's Cancer Center was staffed with one oncologist, one medical physicist and one dosimetrist, who administered one to two Cs-137 temporary implants annually and approximately 121-125 permanent prostate implants annually. The licensee had not used Ir-192 sources for the manual brachytherapy program since 2011.

Regarding the previous 10 CFR 35.67(b)(2) violation the RSO thought that cesium-137 seeds: "AEA Technology Model CDC.T1" leak test frequency was 36 months but the applicable SSDR leak test frequency is 6 months. The SSDR cesium-137 seeds: 3M Health Physics Service, Model 6500 and Model 6520 Series had a leak test frequency of 36 months however, AEA Model CDC.T1 had a leak testing frequency of 36 months but the frequency was for 6 months. As corrective actions to prevent a similar violation, the licensee's RSO for 10 CFR 35.67(f)(5) stored/not used the AEA Model CDC.T1 source, and when a patient needs therapy, then the RSO has the CDC.T1 source leak tested before using the CDC.T1 source.

The inspector: (1) noted that the licensee conducted proper activities per 10 CFR 35.100, 35.200, 35.300, and 35.400; (2) noted that the licensee conducted hazmat training per 49 CFR 172.702; (3) noted that the licensee conducted quality assurance testing for gamma cameras; (4) noted that the licensee did have a procedure for safe use for unsealed radioactive materials; (5) observed written directives for 35.300 & 35.400; (6) obtained information showing proper safe use for 35.100, 35.200, 35.300, and 35.400; (7) read the licensee's spill procedure; (8) read radiation badge records for radiation doses to individuals for 2018, 2019, and 2020; (9) noted that the licensee had proper and calibrated survey meters; (10) observed leak test records; (11) observed sealed source semi-annual physical inventory records; (12) observed patient release records; (13) observed annual audit records per 10 CFR 20.1101(c) for 2018, 2019, and 2020; (14) noted that the licensee properly secured radioactive materials; (15) noted that the licensee conducted daily ambient exposure radiation surveys; (16) noted that the licensee properly disposed of radioactive materials; and (17) noted that the licensee used shielding in the hot lab. No violations of NRC requirements were identified as a result of this inspection.