

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

National Aeronautics & Space Administration
John H. Glenn Research Center
21000 Brookpark Road
Cleveland, Ohio 44135

REPORT NUMBER(S) 2017-001

2. NRC/REGIONAL OFFICE

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

3. DOCKET NUMBER(S)

030-05626

4. LICENSE NUMBER(S)

34-00507-16

5. DATE(S) OF INSPECTION

2/24 and 3/1/2017 with
continuing review through 4/4

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	Michael LaFranzo/Dr. Peter Lee	<i>Michael LaFranzo / Peter Lee</i>	<i>4/6/17</i>
BRANCH CHIEF	Michael A. Kunowski	<i>Michael Kunowski</i>	<i>4/7/17</i>

Docket File Information

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3. DOCKET NUMBER(S) 030-05626	4. LICENSE NUMBER(S) 34-00507-16	5. DATE(S) OF INSPECTION 2/24 and 3/1/2017 with continuing review through 4/4
6. INSPECTION PROCEDURES USED 87104	7. INSPECTION FOCUS AREAS 03.01-03.02	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 3620	2. PRIORITY 5	3. LICENSEE CONTACT Chris Blaiso	4. TELEPHONE NUMBER (216) 433-6520
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☒ Main Office Inspection Next Inspection Date: NA

☐ Field Office Inspection _____

☐ Temporary Job Site Inspection _____

PROGRAM SCOPE

This was a decommissioning inspection associated with the licensee's cyclotron and building radiological characterization and disposal. During the inspection, the NRC inspectors focused on: 1) observation of movement of the cyclotron within the facility and to the transportation vehicles; 2) waste characterization/disposal and transportation of said waste to an authorized off-site facility; and 3) radiological surveys around the areas where the cyclotron had been moved from.

Observations and Findings

On February 24, 2017, the inspectors observed the licensee moving the cyclotron in one piece (the cyclotron weights tens of tons) within the building approximately 60 feet from its original position. A heavy-lift contractor was brought in the do the move who was familiar with radiological conditions. Prior to and immediately after the movement of the cyclotron, the licensee performed radiological surveys in the area where the cyclotron had once been placed, no significant radiological conditions were noted. A radiological dose analysis was conducted prior to the move to ensure radiological doses to workers in the area where in compliance with NRC requirements. No significant radiation fields were noted in areas where workers were routinely operating.

On March 1, 2017, the inspectors reviewed the characterization sampling results of the cyclotron main body containing yokes, vacuum tank, pole, magnet coil. To be conservative, the sampling locations were near the beam where the highest activation occurred. The sampling results was used to determine the activities in the manifest. The inspectors also reviewed the Microshield dose rate modeling to determine the activities of internal components within the vacuum Tank. The inspectors determined that the disposal of the cyclotron main body and internal components meet the exempt concentration for the NON-DOT radioactive material shipment to US Ecology, Idaho.

The inspection was extended to March 31, 2017 due to NRC review of radioactive material transportation documentation.