



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

February 13, 2020

EN 54459  
NMED No. 200014

Mr. Robert Diaz  
Regional Director  
Kaiser Foundation Hospital  
Diagnostic Imaging Department  
3288 Moanalua Road  
Honolulu, HI 96819

SUBJECT: NRC INSPECTION REPORT 030-03546/2020-001

Dear Mr. Diaz:

This letter refers to the announced, limited scope inspection conducted on January 15, 2020, at your facility in Honolulu, Hawaii. The purpose of the inspection was to review the circumstances concerning U.S. Nuclear Regulatory Commission (NRC) Event Number (EN) 54459 reporting the mis-shipment of radioactive material delivered to your facility on December 30, 2019. Within this review, the inspector examined the facts and circumstances of the event, determined a timeline associated with the event, and assessed your response to the event. These reviews included a selected examination of representative records and interviews with personnel. At the conclusion of the inspection on January 15, 2020, the inspector discussed the results of the inspection with you and members of your staff.

Based on the results of the inspection, the NRC did not identify any violations and concluded that Kaiser Foundation Hospital took thorough and appropriate actions upon discovery of this incident. The NRC's inspection results are documented in the enclosed inspection report.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter with its enclosures will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's ADAMS, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions regarding this letter or the enclosures, please contact Ms. Allyce Bolger of my staff at 817-200-1197, or the undersigned at 817-200-1455.

Sincerely,

/RA/

Patricia A. Silva, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Docket: 030-03546  
License: 53-05379-01

Enclosure:  
NRC Inspection Report 030-03546/2020-001

cc w/enclosure:  
J. Eckerd, Manager  
Hawaii Radiation Control Program

J. Priest, Director  
Massachusetts Radiation Control Program

NRC INSPECTION REPORT 030-03546/2020-001 DATED – February 9, 2020

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ADAMS ACCESSION NUMBER: **ML20044D672**

SUNSI Review:

ADAMS:

Non-Publicly Available

Non-Sensitive

Keyword:

By: ABB

Yes  No

Publicly Available

Sensitive

NRC-002

OFFICE	HP:MIB	C:MIB			
NAME	ABBolger	PASilva			
SIGNATURE	N/A	/RA/			
DATE		2/9/2020			

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV**

Docket: 030-03546

License: 53-05379-01

Report: 2020-001

EN No.: 54459

Licensee: Kaiser Foundation Hospital  
Diagnostic Imaging Department

Location Inspected: 3288 Moanalua Road  
Honolulu, Hawaii

Inspection Date: January 15, 2020

Exit Meeting: January 15, 2020

Inspector: Allyce B. Bolger, Health Physicist  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Approved By: Patricia A. Silva, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Attachment: Supplemental Inspection Information

Enclosure

## **EXECUTIVE SUMMARY**

### **Kaiser Foundation Hospital NRC Inspection Report 030-03546/2020-001**

This was an announced limited scope inspection of Kaiser Foundation Hospital. The purpose of the inspection was to review the circumstances concerning U.S. Nuclear Regulatory Commission (NRC) Event Number (EN) 54459 reporting the mis-shipment of radioactive material delivered to your facility on December 30, 2019. Within this review, the inspector examined the facts and circumstances of the event, determined a timeline associated with the event, and assessed your response to the event. These reviews included a selected examination of representative records and interviews with personnel.

Based on the results of the inspection, the NRC did not identify any violations and concluded that, to the best of their capabilities under the circumstances, Kaiser Foundation Hospital took thorough and appropriate actions upon discovery of this event.

## REPORT DETAILS

### 1. Event Review (Inspection Procedure 87103)

#### NRC Event Number 54459

On December 31, 2019, the Massachusetts Radiation Control Program notified the NRC Headquarters Operations Officer (HOO) of an agreement state report of radioactive material delivered to the wrong address. The notification to the NRC HOO indicated that QSA Global, Inc., who are authorized to possess radioactive material under a Massachusetts Radioactive Material License, had reported to Massachusetts that a single package containing eight Iridium-192 sources shipped via a common-carrier had not been delivered to Edmonton, Canada, as intended, but that the package had been delivered to Kaiser Foundation Hospital in Honolulu, Hawaii.

#### Inspection Scope

On January 15, 2020, the NRC performed an announced inspection of Kaiser Foundation Hospital at its facility in Honolulu, Hawaii. The purpose of the inspection was to review the circumstances surrounding NRC EN 54459 as they pertained to Kaiser Foundation Hospital, an NRC licensee. Within this review, the inspector examined the facts and circumstances of the event to develop a timeline associated with the event and determine any actions taken by Kaiser Foundation Hospital.

#### Timeline of NRC Event Number 54459

On the afternoon of December 30, 2019, Kaiser Foundation Hospital received a shipment containing six boxes and a single container, which was strapped down to a pallet and shrink-wrapped. The common-carrier identified that the boxes contained three treadmills, which had been ordered by Kaiser Foundation Hospital's clinic manager and contained on the pallet was a shipment of radioactive material.

At approximately 5 pm, the clinic manager contacted the imaging department regarding the shipment containing radioactive material delivered to the hospital's loading dock. The diagnostic imaging manager responded to the loading dock and observed that the package contained numerous shipping labels; however, no information regarding the contents of the shipment were readily visible. The diagnostic imaging manager was unaware of any radioactive material scheduled to be delivered to the hospital and, believing the shipment may contain calibration sources, had the package secured in a locked utility room beside the loading dock until nuclear medicine staff would be available to process the delivery the following morning.

The following morning, December 31, 2019, when the nuclear medicine technologist arrived and performed the radiation receipt surveys and pulled back the shrink wrap, the nuclear medicine technologist discovered a Yellow-III transportation label with a transportation index of 1.2 and shipping papers identifying the contents contained Iridium-192 sources destined to be delivered to Edmonton, Canada. Realizing that this package contained radioactive material that the licensee had not ordered nor was authorized to possess Kaiser Foundation Hospital took immediately actions to contact the common carrier.

Kaiser Foundation Hospital initially had issues contacting the common carrier due to it being New Year's Eve and the individuals whom Kaiser Foundation Hospital were able to contact could not locate any record of this shipment. Kaiser Foundation Hospital additionally notified the shipper of the radioactive material, QSA Global, Inc. After several more attempts, the knowledgeable individuals for the common carrier were eventually contacted and on January 2, 2020, the common carrier retrieved the package from the hospital.

Kaiser Foundation Hospital kept the package secure until it was retrieved by the common carrier and increased the frequency at which the hospital's security performed roving patrols. Beyond removing some of the shrink wrap, the hospital did not tamper with the package. Receipt radiation surveys performed by the nuclear medicine technologist demonstrated that radiation levels of the package were 1.7 mrem/hour at the surface and 0.7 mrem/hour at approximately one meter; in confirmation with the package's transportation label and transportation index. Radiation levels outside the door where the package was secured were approximately 0.7 mrem/hour and, for the relatively short duration that the package was in Kaiser Foundation Hospital's possession, these radiation levels would not rise to a level of concern regarding radiation exposure to members of the public.

## **2. Conclusions**

Based on the results of the inspection, the NRC did not identify any violations and concluded that, to the best of their capabilities under the circumstances, Kaiser Foundation Hospital took thorough and appropriate actions upon discovery of the mis-delivered radioactive shipment reported in NRC EN 54459.

## **3. Exit Meeting Summary**

At the conclusion of the onsite inspection on January 15, 2020, the inspector briefed the regional manager, Robert Diaz, and members of his staff that the NRC had concluded that Kaiser Foundation Hospital had taken the appropriate actions upon discovery of this event.

**SUPPLEMENTAL INSPECTION INFORMATION**

**PARTIAL LIST OF PERSONS CONTACTED**

Robert Diaz, Regional Director  
Larry Ham, Diagnostic Imaging Manager  
Harry Palmer, Radiation Safety Officer  
Kellie Daniel, Nuclear Medicine Technologist  
Donna Gabriel, Cardiology Clinic Manager

**INSPECTION PROCEDURES USED**

87103 Inspection of Material Licensees Involved in an Incident or Bankruptcy Filing

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

None

Closed

None

Discussed

None

**LIST OF ACRONYMS AND ABBREVIATIONS USED**

ADAMS	Agencywide Documents Access and Management System
CFR	<i>Code of Federal Regulations</i>
EN	Event Number
NRC	Nuclear Regulatory Commission
RSO	Radiation Safety Officer