



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

June 5, 2017

EA-17-065

Mr. Brian J. McKenna
Radiation Safety Officer
Engineering & Inspections Hawaii, Inc.
P.O. Box 700217
Kapolei, HI 96709

SUBJECT: NRC INSPECTION REPORT 030-36017/2017-001

Dear Mr. McKenna:

This letter refers to the unannounced inspection conducted on January 11 and 13, 2017, at a temporary job site in Dededo, Guam. This inspection examined activities conducted under your license as they relate to public health and safety, the common defense and security, and to confirm compliance with the U.S. Nuclear Regulatory Commission's (NRC) rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of an examination of selected procedures and representative records, observation of licensed activities and facilities, independent radiation measurements, and interviews with personnel. The enclosed report presents the results of this inspection. The inspector discussed the preliminary inspection findings with Mr. Ken McNamara, Operations Supervisor, on January 13, 2017, at the conclusion of the onsite portion of the inspection. A final exit briefing was conducted telephonically with Mr. McNamara and you on May 16, 2017.

Based on the results of this inspection, apparent violations were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. An apparent violation being considered for escalated enforcement involved the failure to notify the appropriate NRC regional office when conducting radiographic operations or storing radioactive material at a location not listed on the license for a period in excess of 180 days in a calendar year as required by Title 10 of the *Code of Federal Regulations* (CFR) 34.101(c). One or more apparent violations involving security requirements are discussed in the non-public Attachment 2 of the Enclosure. The circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective action were discussed with you on May 16, 2017.

Attachment 2 of the Enclosure contains Sensitive Unclassified Non-Safeguards Information. When separated from Attachment 2, this cover letter and Attachment 1 of the Enclosure are decontrolled.

B. McKenna

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Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued for these inspection findings at this time. In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) request a predecisional enforcement conference (PEC); or (2) request alternative dispute resolution (ADR). If a PEC is held, the NRC will issue a meeting notice to announce the time and date of the conference; however, the PEC will be closed to public observation since Security-Related Information will be discussed. If you decide to participate in a PEC or pursue ADR, please contact Ms. Vivian H. Campbell, Chief, Materials Licensing and Inspection Branch, at 817-200-1455 within 10 days of the date of this letter to notify the NRC of your intended response. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. You can find the Information Notice on the NRC Web site at <http://pbadupws.nrc.gov/docs/ML0612/ML061240509.pdf>.

In lieu of a PEC, you may request ADR with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC employs is mediation. Mediation is a voluntary, informal process in which a trained neutral mediator works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>. The Cornell University Scheinman Institute on Conflict Resolution (Cornell) has agreed to facilitate the NRC's program as a neutral third party. Please contact Cornell at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and Attachment 1 of the enclosed inspection report will be made available electronically for public inspection in the NRC Public Document Room or in the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

B. McKenna

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However, Attachment 2 of the enclosed inspection report contains Security-Related Information in accordance with 10 CFR 2.390(d)(1) and its disclosure to unauthorized individuals could present a security vulnerability. Therefore, Attachment 2 of the enclosed inspection report will not be made available electronically for public inspection in the NRC Public Document Room or from ADAMS.

If you have any questions concerning this matter, please contact Ms. Vivian H. Campbell of my staff, at 817-200-1455.

Sincerely,

/RA/

Mark R. Shaffer, Director
Division of Nuclear Materials Safety

Docket No. 030-36017

Enclosure:

NRC Inspection
Report 030-36017/2017-001
w/Attachments 1 and 2

cc w/Enclosure:

M. Thomas Nadeau
Chief Environmental Public Health Officer
Division of Environmental Health
Guam Department of Public Health and Social Services
123 Chalan Kareta
Mangilao, Guam 96913-6304

Jeffrey M. Eckerd, Manager
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**U.S. NUCLEAR REGULATORY COMMISSION
REGION IV**

Docket No. 030-36017

License No. 53-27731-01

Report No. 030-36017/2017-001

EA No. EA-17-065

Licensee: Engineering & Inspections Hawaii, Inc.

Facility: Temporary Job Site at Nova Group, Inc., Calvo Commercial Center, Unit 108, 600 Harmon Loop Road, Dededo, Guam

Inspection Dates: January 11 and 13, 2017

Exit Meeting Date: May 16, 2017

Inspector: Janine F. Katanic, PhD, CHP
Senior Health Physicist
Materials Licensing and Inspection Branch

Observed by: Katherine B. Duenas
Guam Department of Public Health and Social Services

Approved by: Vivian H. Campbell
Chief, Materials Licensing and Inspection Branch
Division of Nuclear Materials Safety

Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

**Engineering & Inspections Hawaii, Inc.
NRC Inspection Report 030-36017/2017-001**

Program Overview

Engineering and Inspections Hawaii, Inc. (E&I Hawaii) is authorized under NRC Materials License Number 53-27731-01, to possess and use byproduct material, including iridium-192, for industrial radiographic operations. Licensed activities are authorized to be performed at the licensee's facility located in Hawaii, as well as at temporary job sites (TJS) in areas of NRC jurisdiction. The licensee's operations included the performance of industrial radiography activities at a TJS on Guam, an area of NRC jurisdiction. (Attachments 1 and 2, Section 1)

Inspection Findings

One apparent violation of NRC requirements related to health and safety was identified. The apparent violation involved the licensee's failure to notify the appropriate NRC regional office prior to exceeding 180 days in a calendar year, for calendar year (CY) 2015 and 2016, when conducting radiographic operations or storing radioactive material at a TJS on Guam, a location not listed in its NRC materials license. (Attachment 1, Section 2)

In addition, one or more apparent violations were identified related to the NRC's security requirements. These apparent violation(s) are described in the non-public attachment to this report. (Attachment 2, Section 2)

Corrective Actions

As of June 5, 2017, for its TJS on Guam, the licensee has not provided the NRC with a correction to its CY 2015 notification nor provided its 180 day notification for CY 2016. (Attachment 1, Section 3)

The licensee's corrective actions related to the NRC's security requirements are described in the non-public attachment to this report. (Attachment 2, Section 3)

REPORT DETAILS – Health and Safety

1 Program Overview (Inspection Procedure 87121)

1.1 Program Scope

Engineering and Inspections Hawaii, Inc. (E&I Hawaii) is authorized under NRC Materials License Number 53-27731-01, to possess and use byproduct material, including iridium-192, for industrial radiographic operations. Licensed activities are authorized to be performed at the licensee’s facility located in Kapolei, Hawaii, as well as at temporary job sites (TJS) in areas of NRC jurisdiction. The licensee’s Radiation Safety Officer (RSO) is based out of a corporate office in Pennsylvania. The Hawaii-based operations are overseen by a site RSO who is also the Operations Supervisor. The licensee’s Hawaii-based operations include the performance of industrial radiography activities at a TJS on Guam, an area of NRC jurisdiction.

1.2 Observations and Findings

The inspector observed licensed activities and the licensee’s TJS facilities, reviewed records, procedures, and documents maintained by the licensee, conducted independent radiation measurements, and interviewed licensee personnel at a TJS on Guam. The inspector also obtained and reviewed additional records, procedures, and documents from the Hawaii-based site RSO following the inspection. Collectively, the activities observed, interviews conducted, and documents reviewed described the licensee’s implementation of its radiation safety program.

2 Inspection Findings (Inspection Procedure 87121)

2.1 Inspection Scope

On January 11 and 13, 2017, the inspector conducted an unannounced inspection at the licensee’s industrial radiography mobile darkroom trailer, which was located at a client facility in Dededo, Guam. The licensee’s client was Nova Group, Inc., and the project being performed was the upgrade of the fuel pipeline on Guam from the Sasa Valley Fuel Farm to Andersen Air Force Base. The licensee was performing industrial radiographic activities to support the project. The inspector observed licensed activities, which at the time of the inspection consisted of the storage of an industrial radiographic device in a mobile darkroom trailer. The inspector reviewed records, procedures, and documents maintained by the licensee at the trailer, conducted independent radiation measurements, and interviewed licensee personnel. Following the onsite inspection, the inspector reviewed additional records, procedures, and documents that were requested and obtained from the Hawaii-based site RSO.

2.2 Observation and Findings

The inspector determined that E&I Hawaii commenced licensed activities at the TJS on Guam on October 30, 2014. Licensed activities on Guam included the possession, use, and storage of licensed radioactive materials related to the performance of industrial radiographic activities. These radiographic activities were performed by E&I Hawaii for a client, Nova Group, Inc., to support the upgrade of the fuel pipeline on Guam from the

Sasa Valley Fuel Farm to Andersen Air Force Base. Although the project stretches over several miles on Guam, it is one project and is considered to be one TJS.

The licensee continued to perform licensed activities at the TJS on Guam until February 1, 2016, at which point work on the project temporarily halted and the E&I Hawaii personnel were demobilized. Certain equipment, including the licensed material in the radiography camera, was concurrently shipped from Guam to Hawaii. Work on the project later resumed and E&I Hawaii personnel were remobilized to Guam. For the re-mobilization, the licensed material was shipped to Guam and received by E&I Hawaii personnel on April 27, 2016. The licensee continued to perform licensed activities at the TJS on Guam through January 13, 2017, the date of the NRC's onsite inspection.

Apparent violation of 10 CFR 34.101(c)

Title 10 *Code of Federal Regulations* (10 CFR) 34.101(c) requires, in part, that any licensee conducting radiographic operations or storing radioactive material at any location not listed on the license for a period in excess of 180 days in a calendar year (CY), shall notify the appropriate NRC regional office prior to exceeding the 180 days.

For CYs 2015 and 2016, E&I Hawaii conducted radiographic operations or stored radioactive material at a location not listed on its NRC materials license for a period in excess of 180 days, and failed to notify the appropriate NRC regional office prior to exceeding 180 days. The appropriate NRC regional office that should have been notified by E&I Hawaii for licensed activities on Guam is NRC Region IV.

For CY 2015, the licensee conducted radiographic operations or stored radioactive material on Guam from January 1 through December 31, 2015. The licensee provided notification of this TJS to the NRC in a letter dated November 23, 2015, after exceeding 180 days for CY 2015. Notification for CY 2015 should have been provided by E&I Hawaii to the NRC by June 29, 2015, prior to exceeding 180 days at the TJS on Guam.

For CY 2016, the licensee conducted radiographic operations or stored radioactive material on Guam from January 1 through February 1, 2016, and from April 27 through December 31, 2016, a period of 281 days. The licensee did not provide the required notification to the NRC for CY 2016. Notification for the TJS on Guam for CY 2016 should have been provided by E&I Hawaii to the NRC by September 21, 2016.

The licensee's failure to notify the appropriate NRC regional office when conducting radiographic operations or storing radioactive material at a location not listed on the license for a period in excess of 180 days in a CY, prior to exceeding the 180 days, was identified as an apparent violation of 10 CFR 34.101(c). (030-36017/2017-001-01)

2.3 Conclusions

One apparent violation of the NRC's health and safety requirements was identified, involving E&I Hawaii's failure to notify the appropriate NRC regional office when conducting radiographic operations or storing radioactive material at a location not listed on E&I Hawaii's NRC materials license for a period in excess of 180 days in a CY, prior

to exceeding 180 days, for CY 2015 and 2016. The apparent violation is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy.

3 Corrective Actions

At the conclusion of the onsite portion of the inspection, the inspector discussed the notification requirement in 10 CFR 34.101(c) with the E&I Hawaii personnel on Guam and telephonically with the site RSO. The site RSO thought that the 180 day notification to the NRC was a one-time notification as opposed to a per-CY requirement.

At the conclusion of the onsite inspection on January 13, 2017, during the telephonic exit meeting on May 16, 2017, and again on May 30, 2017, the licensee was asked to take actions to correct the apparent violation. As of June 5, 2017, for its TJS on Guam, the licensee has not provided the NRC with a correction to its CY 2015 notification nor provided its 180 day notification for CY 2016. For CY 2017, the licensee has conducted radiographic operations or stored radioactive material at the TJS on Guam since January 1, 2017, and it appears that these activities may continue past June 30, 2017, which is greater than 180 days. On April 6, 2017, the licensee submitted an amendment request to add the TJS on Guam as a field station to its NRC license. As of June 5, 2017, this amendment request was still under review by the NRC.

4 Exit Meeting Summary

On May 16, 2017, a final telephonic exit meeting was conducted with the RSO and Operations Supervisor, to discuss the inspection findings and the one apparent violation of NRC health and safety requirements. The NRC representatives described the NRC's enforcement process and the options for the licensee to request to attend a PEC or request ADR with the NRC.

Supplemental Inspection Information – Health and Safety

PARTIAL LIST OF PERSONS CONTACTED

Brian McKenna, RSO
Ken McNamara, Operations Supervisor and site RSO
Greg Snell, Radiographer
Brenda Reinsel, Assistant Radiographer
Bruce Levan, Project Superintendent, Nova Group, Inc.

INSPECTION PROCEDURES USED

87121 Industrial Radiography Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-36017/2017-001-01 APV Failure to notify the appropriate NRC regional office when conducting radiographic operations or storing radioactive material at a location not listed on the license for a period in excess of 180 days in a CY, prior to exceeding 180 days. (10 CFR 34.101(c))

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ADR	Alternative Dispute Resolution
APV	Apparent Violation
CFR	<i>Code of Federal Regulations</i>
CY	Calendar Year
DNMS	Division of Nuclear Materials Safety
E&I Hawaii	Engineering & Inspections Hawaii, Inc.
ICR	Institute on Conflict Resolution
NRC	Nuclear Regulatory Commission
PEC	Pre-decisional Enforcement Conference
RSO	Radiation Safety Officer
TJS	Temporary Job Site

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NRC INSPECTION REPORT 030-36071/2017-001 DATED June 5, 2017

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