



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

February 21, 2019

EA-18-164

Mr. Donald A. Millar
President and Radiation Safety Officer
Alaska Industrial X-Ray, Inc.
8881 Golovin Street,
Anchorage, AK 99507

SUBJECT: NOTICE OF VIOLATION; NRC INSPECTION REPORT 030-10346/2018-001

Dear Mr. Millar:

This letter refers to the unannounced inspection conducted on October 23, 2018, at your facility in Anchorage, Alaska. The purpose of the inspection was to examine activities conducted under your license as they relate to public health and safety, to confirm compliance with the U.S. Nuclear Regulatory Commission's (NRC's) rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, independent radiation measurements, and interviews with personnel. The preliminary inspection findings were discussed with you and your staff at the conclusion of the onsite portion of the inspection on October 23, 2018. A final exit briefing was conducted telephonically with you on January 31, 2019.

In the telephonic exit briefing on January 31, 2019, Mr. James Thompson of my staff informed you that the NRC was considering escalated enforcement for apparent violations involving NRC security requirements. Mr. Thompson also informed you that the NRC staff had sufficient information regarding the apparent violations and your corrective actions to make an enforcement decision without the need for a predecisional enforcement conference or a written response from you. You indicated that Alaska Industrial X-Ray, Inc. did not believe that a predecisional enforcement conference or written response was needed. Therefore, the NRC is making its enforcement decision as follows.

Based on the information developed during the inspection, the NRC has determined that violations of NRC requirements occurred. The violations involved NRC security requirements and are cited in the enclosed non-public Notice of Violation (Notice) contained in Enclosure 1. The circumstances surrounding the violations are described in detail in the non-public portion of the inspection report contained in Enclosure 3. Because of the potential consequences associated with the violations, the violations have been categorized as an escalated

Enclosures 1 and 3 contain Official Use Only - Security-Related Information. When separated from Enclosures 1 and 3, this cover letter and Enclosure 2 are decontrolled.

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enforcement action in accordance with the NRC Enforcement Policy. The Enforcement Policy can be found on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>.

Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. The NRC determined that *Corrective Action* credit is warranted for your corrective actions, which were considered both prompt and comprehensive following the non-public correspondence you provided to the NRC dated December 3, 2018, and supplemental communications documented in Enclosure 3.

Therefore, to encourage prompt and comprehensive correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty. In addition, issuance of these violations constitutes an escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding: (1) the reason for the violations; (2) the corrective actions that have been taken and the results achieved; and (3) the date when full compliance was achieved is already adequately addressed in your letter dated December 3, 2018, and in the enclosed inspection report. Specifically, the NRC has restated your corrective actions in Enclosure 3, Section 4, to provide you an opportunity to review the NRC's understanding of your actions planned and completed. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice (Enclosure 1).

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and Enclosure 2 will be made available electronically for public inspection in the NRC Public Document Room and from 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>.

However, Enclosures 1 and 3 contain Security-Related Information in accordance with 10 CFR 2.390(d)(1) and their disclosure to unauthorized individuals could present a security vulnerability. Therefore, the material in Enclosures 1 and 3 will not be made available for public inspection in the NRC's Public Document Room or electronically from the NRC's ADAMS. If you choose to respond to this letter and Security-Related Information is necessary to provide an acceptable response, please mark your entire response Security-Related Information in accordance with 10 CFR 2.390(d)(1) and follow the instructions for withholding in 10 CFR 2.390(b)(1). In accordance with 10 CFR 2.390(b)(1)(ii), the NRC is waiving the affidavit requirements for your response.

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

Sincerely,

/RA/

Scott A. Morris
Regional Administrator

Docket No. 030-10346
License No. 50-16084-01

Public Enclosure:

2. Health and Safety - NRC Inspection
Report 030-10346/2018-001

Non-Public Enclosures:

1. Notice of Violation
3. Security - NRC Inspection
Report 030-10346/2018-001

cc (w/Enclosures):

Dr. Jilly, State Lab Director
State of Alaska Radiation Program

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

Docket: 030-10346

License: 50-16084-01

Report: 2018-001 (Health and Safety)

EA No.: 18-164

Licensee: Alaska Industrial X-Ray, Inc.

Locations Inspected: 8881 Golovin Street, Anchorage, Alaska
Temporary Job Site at Arctic Foundations, 5621 Arctic Blvd,
Anchorage, Alaska

Inspection Dates: October 23, 2018

Inspector: Jason vonEhr, Senior Health Physicist
Materials Licensing and Inspection Branch
Division of Nuclear Materials Safety

Approved By: James L. Thompson, Chief
Materials Licensing and Inspection Branch
Division of Nuclear Materials Safety

Attachment: Supplemental Inspection Information

Enclosure 2

EXECUTIVE SUMMARY

**Alaska Industrial X-Ray, Inc.
NRC Inspection Report 030-10346/2018-001 (Health and Safety)**

Program Overview

Alaska Industrial X-Ray, Inc. is authorized under U.S. Nuclear Regulatory Commission Materials License Number 50-16084-01 to possess and use byproduct materials, including iridium-192, for industrial radiographic operations. Licensed activities are authorized to be performed at the licensee's permanent radiographic installation located in Anchorage, Alaska, as well as at temporary job sites in areas of NRC jurisdiction. (Enclosure 2, Sections 2.2 and 2.3)

Inspection Findings

No violations were identified regarding NRC health and safety requirements. However, one or more violations were identified related to the NRC's security requirements. These violations are described in the non-public Notice of Violation and the Security-Related inspection report. (Enclosures 1 and 3)

Corrective Actions

In the follow-up to the inspection, the licensee provided the inspector evidence of comprehensive corrective actions that were implemented to restore compliance. The licensee's corrective actions involved NRC security requirements and are described in the non-public Enclosure. (Enclosure 3)

REPORT DETAILS - Health and Safety

1. Program Overview (Inspection Procedure 87121)

1.1. Program Scope

Alaska Industrial X-Ray, Inc. (AIX) is authorized under U.S. Nuclear Regulatory Commission (NRC) Materials License 50-16084-01 to possess and use byproduct materials, including iridium-192, for industrial radiographic operations. Licensed activities are authorized to be performed at the licensee's permanent radiographic installation (PRI) in Anchorage, Alaska, as well as at temporary job sites in areas of NRC jurisdiction. At the time of the inspection, the licensee had eight radiographers and radiographer assistants and two radiography rigs for field work.

1.2. Inspection Scope

On October 23, 2018, the NRC performed a routine, unannounced inspection of AIX at its facility in Anchorage, Alaska, and at a temporary job site at a client-facility also in Anchorage, with in-office reviews through January 10, 2019. The scope of the inspection was to perform a review of the licensee's radiation safety and security program. Within this area, the inspection included an examination of activities conducted under the AIX license as they relate to public health and safety, to confirm compliance with the NRC's rules, regulations, and with the conditions of the AIX license. The inspection consisted of a selected examination of procedures and representative records, observations of activities at the facility and in the field, independent radiation measurements, and interviews with AIX personnel.

2. Observations and Findings

2.1. Main-Office Review

Licensed activities in Anchorage, Alaska, included the possession, storage, and use of licensed radioactive materials related to the performance of industrial radiographic activities.

The inspector observed licensed activities at the licensee's facility and the temporary job site, reviewed records, procedures, and documents maintained by the licensee, conducted independent and confirmatory radiation measurements, and interviewed AIX personnel at the licensed facility and at the temporary job site.

2.2. Permanent Radiographic Installation Review

The inspector reviewed the new installation and implementation of a PRI at the Anchorage facility. The inspector found the licensee commitments involving the construction and the operation of the facility, to be consistent with the commitments made and tied to the license in the letter, with enclosures, dated February 6, 2018.

The inspector reviewed and evaluated the facility's physical properties (such as the shielding material, distance to nearest neighboring building in each direction), radiological properties (radiation surveys from a known source activity), safety systems

(audible and visual alarm signals), and hazard postings. The inspector interviewed AIX staff to understand how the facility had been used and reviewed records for the type and frequency of past use.

The licensee's PRI included a system of cameras monitoring the outside area around the radiographic operations area. The radiographer conducting operations has access to a television monitor with live-access to these camera feeds, to ensure that neither employees of AIX or members of the general public are near the external portions of the PRI during radiographic exposures. The inspector and AIX staff tested the radiation monitoring alarms and 'door open' sensors to ensure that the system functioned as designed, with no issues identified.

Based on all the above, the inspector concluded that the licensee met or exceeded the commitments made during the February 2018 licensing process to receive the authorization for the PRI.

2.3. Temporary Job Site Review

The inspector performed a temporary job site inspection at a fabrication shop in Anchorage, Alaska on Arctic Boulevard. At the temporary job site, radiographic activities were performed by AIX for a client to support the client's quality control program. The inspector observed the licensee set up and perform a number of radiographic exposures. The inspector observed the licensee personnel adequately use calibrated personnel radiation protection equipment such as a survey meter, direct ion dosimeter, and personal dosimeter. The licensee personnel controlled the outer perimeter of the radiation area, utilized available equipment as shielding to reduce their personal radiation exposures, and controlled the radiographic camera at all times. No violations were identified regarding the conduct of the licensee at the temporary job site.

Based on the activities observed, interviews conducted, and documents reviewed, the inspector determined that the licensee was adequately implementing its radiation safety program.

3. Conclusions

The inspector reviewed the licensee's radiation safety program and identified no violations in areas concerning NRC health and safety requirements.

4. Exit Meeting Summary

The inspector presented the preliminary inspection findings at the conclusion of the on-site inspection on October 23, 2018, with Mr. Donald Millar, Radiation Safety Officer. On January 31, 2019, a final telephonic exit meeting was conducted with Mr. Millar. The licensee acknowledged the findings and did not dispute any of the details presented during the exit call.

SUPPLEMENTAL INSPECTION INFORMATION

LIST OF PERSONS CONTACTED

Donald Millar, President and Radiation Safety Officer

INSPECTION PROCEDURES USED

87121 Industrial Radiography Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS AND ABBREVIATIONS USED

ADAMS	Agencywide Documents Access and Management System
AIX	Alaska Industrial X-Ray, Inc.
NRC	Nuclear Regulatory Commission
PRI	Permanent Radiographic Installation

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NOTICE OF VIOLATION; NRC INSPECTION REPORT 030-10346/2018-001 – DATED
FEBRUARY 21, 2019

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ADAMS:

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A.3

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