



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

January 9, 2007

EA-06-293
NMED No. 060429

Kakivik Asset Management
ATTN: Myrna Gardner, President/CEO
111 W. 16th Avenue, Suite 100
Anchorage, Alaska 99501

SUBJECT: NRC INSPECTION REPORT NO. 030-35371/06-001

Dear Ms. Gardner:

This refers to safety inspections conducted on August 2, 2006, at your facility in Anchorage, Alaska, and on August 8, 2006, at your facility in Kuparuk, Alaska, with continued in-office review through December 21, 2006. The inspections were an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations. Within these areas, the inspections consisted of a selected examination of records, observation of activities, and interviews with personnel. The preliminary inspection findings were discussed with Mr. Jeff Arveson at the conclusion of the onsite portion of the inspection. A follow-up telephone briefing was again conducted with Mr. Arveson on October 23, 2006. A final exit briefing was conducted telephonically with you and Mr. Arveson on January 3, 2007.

Based on the results of the inspection, two apparent violations of NRC requirements 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's web site at www.nrc.gov; select **What We Do, Enforcement**, then **Enforcement Policy**. The apparent violations involve: (1) conducting a source retrieval when this activity was prohibited by your license; and (2) failure to notify the NRC within 24 hours of an event in which equipment fails to function as designed, when the equipment is required by regulation or license condition to prevent exposures to radiation. The circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective action was discussed with you during the exit briefing on January 3, 2007. Additionally, you have initiated corrective actions, some of which are documented in this report, to address the violations. As a result, it may not be necessary to conduct a predecisional enforcement conference in order to enable the NRC to make an enforcement decision.

In addition, since your facility has not been the subject of escalated enforcement actions within the last two years, and based on our understanding of your corrective action, a civil penalty may not be warranted in accordance with Section VI.C.2 of the Enforcement Policy. The final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either: (1) respond to the apparent violations addressed in this inspection report within 30 days of the date of this letter, or (2) request a predecisional enforcement conference. If a conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. During our January 3, 2007, telephone discussion, you indicated tentative plans to meet with us on February 6, 2007, at our Arlington, Texas, office to address these apparent violations. Please contact Vivian Campbell at (817) 860-8287 within 7 days of the date of this letter to confirm your intended response.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in Inspection Report Number 030-35371/06-001; EA-06-293" and should include for each apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. In presenting your corrective action, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violation. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION," may be helpful. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a predecisional enforcement conference.

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. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, Enclosure 1, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,



Leonard D. Wert, Jr., Director
Division of Nuclear Materials Safety

Kakivik Asset Management

-3-

Docket No.: 030-35371
License No.: 50-27667-01

Enclosures:

1. NRC Inspection Report 030-35371/06-001
2. Predecisional Enforcement Conference Agenda
3. Excerpt from NRC Information Notice 96-28

cc w/Enclosures 1-2:
Alaska Radiation Control Program Director

ENCLOSURE 1

U.S. Nuclear Regulatory Commission
Region IV

Docket No.: 030-35371

License No.: 50-27667-01

Report No.: 06-001

EA No.: 06-293

Licensee: Kakivik Asset Management

Facility: Kakivik Asset Management Corporate Office
and Kuparuk, Alaska, Field Office

Location: Anchorage, Alaska
Kuparuk, Alaska

Date: August 2-8, 2006

Inspector: Randy R. Erickson, Health Physicist
Nuclear Materials Inspection Branch

Approved By: Vivian H. Campbell, Chief
Nuclear Materials Inspection Branch

Enclosure: Supplemental Inspection Information

EXECUTIVE SUMMARY

Kakivik Asset Management (Kakivik)
NRC Inspection Report 030-35371/06-001

This was a routine, announced inspection of licensed activities involving the use of byproduct material for industrial radiography. The scope of the inspection was limited to a partial review of records maintained at the corporate office and detailed discussions with licensee management, in addition to a comprehensive review of activities at a field office located in Kuparuk, Alaska.

Program Overview

Kakivik is authorized under NRC License 50-27667-01 to possess and use byproduct material (cesium-137 and iridium-192) in the performance of industrial radiographic operations and radiation survey instrument calibrations at temporary jobsite locations in areas of NRC jurisdiction. Industrial radiography work is dispatched daily from Kakivik's authorized storage locations in Kuparuk, Fairbanks, Valdez, Kenai, and Alpine, Alaska. At the time of the inspection, the licensee employed approximately 150 personnel who were directly involved in daily radiographic operations. (Section 1)

Inspection Findings

- The licensee conducted a source retrieval on March 8, 2006, when this activity was prohibited by the NRC license. This was identified as an apparent violation of License Condition 18F. (Section 2)
- The licensee failed to notify the NRC within 24 hours of an event in which equipment failed to function as designed, when the equipment was required by regulation or license condition to prevent exposures to radiation and radioactive materials exceeding regulatory limits. This was identified as an apparent violation of 10 CFR 30.50(b)(2)(i). (Section 2)

Corrective Actions

- On September 20, 2006, the licensee submitted a license amendment request, in part, to add the authorization to perform source retrievals. Additionally, the licensee has developed specific procedures to follow in the event of a source disconnect. (Section 3)
- On July 3, 2006, after being advised of the regulatory requirement for event notification, the licensee made telephonic notification of the source disconnect to NRC's Headquarters Operations Center. Additionally, the licensee modified their emergency procedures to include instructions to contact NRC within 24 hours of a source disconnect. (Section 3)

Report Details

1 Program Overview (87121)

1.1 Inspection Scope

The inspector reviewed the license application, supporting documents, and other records provided by the licensee. Collectively, these documents describe the licensee's radiation safety program.

1.2 Observations and Findings

Kakivik Asset Management (Kakivik) is authorized under NRC License 50-27667-01 to possess and use byproduct material (cesium-137 and iridium-192) in the performance of industrial radiographic operations and radiation survey instrument calibrations at temporary jobsite locations in areas of NRC jurisdiction. Industrial radiography work is dispatched daily from Kakivik's authorized storage locations in Kuparuk, Fairbanks, Valdez, Kenai, and Alpine, Alaska. At the time of the inspection, the licensee employed approximately 150 personnel who were directly involved in daily radiographic operations.

2 Inspection Findings (87121)

2.1 Inspection Scope

The inspection included a review of selected records maintained by the licensee at both the Anchorage, Alaska, corporate office and the Kuparuk, Alaska, field office. Detailed discussions regarding the radiation safety program were conducted with the Radiation Safety Officer (RSO) at the corporate office, and with two Radiation Safety Supervisors (senior staff) at the Kuparuk field office. In addition, the inspector reviewed documentation on a source disconnect which occurred on March 8, 2006, and the licensee's reporting of that event.

2.2 Observations and Findings

License Condition 18F requires, in part, that the licensee comply with the procedures attached to a letter dated August 28, 2004. Item 1.3.4 of Section 13 entitled "Emergency Procedures" states that, "*Kakivik Asset Management will not perform source retrievals and will use the services of a person specifically licensed by the NRC or an Agreement State to perform the retrievals of our sources.*"

On April 17, 2006, NRC received a 30-day report from Kakivik describing a source disconnect event which occurred on March 8, 2006, at a temporary jobsite near the Alpine, Alaska, field office. The report stated that at approximately 2:30 a.m, AST, after about 30 exposures, a radiography crew was unable to retract a source back into an INC Model IR100 (S/N: 6621) exposure device containing a 2,590 gigabecquerel (70 curie) iridium-192 source. After determining the source was not lodged in the guide

tube and had actually become disconnected from the drive cable, the crew consulted with the RSO who authorized them to attempt a source retrieval. After securing the area and after consulting with the RSO, the crew brought the remainder of Kakivik's Alpine office staff to the jobsite to place lead shot bags on the guide tube. Kakivik's plan was to utilize all available staff in an attempt to more evenly distribute any dose received. The crew then removed the collimator end of the guide tube on the affected camera, used duct tape to secure the end of the affected camera's guide tube to the open end of another guide tube which was connected to a second camera which did not contain a source. The staff then used the empty camera's drive cable to push the disconnected source back into the affected camera. This operation was performed successfully. The camera was then taken out of service, sent to INC for maintenance, and eventually returned to Kakivik and put back into service. The licensee engaged 12 staff members in the source retrieval process. Each wore appropriate personnel dosimetry, alarm rate meters and direct reading dosimeters. Following the retrieval, direct reading dosimeters were read and none exceeded any regulatory limit. Based on that information, the RSO chose not to send personnel dosimetry in for an immediate processing. Instead, he determined the dosimetry badge exchanges would remain at the routine monthly interval. The highest exposure recorded for any one individual for the entire routine monitoring period was 100 millirem.

The inspector reviewed with the RSO the license condition that prohibits Kakivik from performing source retrievals. Kakivik had specifically outlined in its operating procedures that it would not perform source retrievals. Additional conversations with the RSO indicated that while Kakivik's staff appear to have performed the source retrieval in a safe and logical manner, none of the staff on site had been specifically trained for source retrieval. The RSO had been trained in source retrieval and provided instructions to the crew by telephone. The licensee had no procedures for source retrieval.

The retrieval of a disconnected source was identified as apparent violation of Condition 18F of NRC License 50-27667-01. (030-35371/006-01)

10 CFR 30.50(b)(2)(i) requires, in part, that licensees are required to notify the NRC within 24 hours of an event in which equipment fails to function as designed when the equipment is required by regulation or license condition to prevent exposures to radiation and radioactive materials exceeding regulatory limits.

The source disconnect and retrieval occurred on March 8, 2006. The licensee developed a 30-day report which was received in NRC's Region IV office on April 17, 2006. After noting the file copy, an NRC inspector contacted the Kakivik RSO who made official notification to NRC's Headquarters Operations Center on July 3, 2006. During the inspection on August 2, 2006, the RSO was interviewed about his understanding of NRC's reporting requirements. The RSO indicated that he believed he was making notification in accordance with 10 CFR 34.101 which requires a 30-day report. The RSO added that he was unaware of the 10 CFR 30.50 reporting requirement at the time of the source disconnect.

The failure to notify the NRC within 24 hours when an event in which equipment fails to function as designed, when the equipment is required by regulation or license condition to prevent exposures to radiation and radioactive materials exceeding regulatory limits, was identified as an apparent violation of 10 CFR 30.50(b)(2)(i). (030-35371/006-02)

2.3 Conclusions

The inspection identified two apparent violations involving the failures to: (1) have specific authorization for source retrieval and the retrieval of a disconnected source by individuals who were not authorized by NRC license; and, (2) to notify the NRC within 24 hours of an event in which equipment failed to function as designed, when the equipment was required by regulation or license condition to prevent exposures to radiation and radioactive materials exceeding regulatory limits.

3 **Corrective Actions (87121)**

On September 20, 2006, the licensee submitted a license amendment request, in part, to add the authorization to perform source retrievals. Additionally, the licensee has developed specific emergency procedures to follow in the event of a source disconnect.

On July 3, 2006, after being advised of the regulatory requirement by the NRC, the licensee made notification of the source disconnect to NRC's Headquarters Operations Center. Additionally, the licensee modified their procedures to include instructions to contact NRC in the event of a source disconnect.

4 **Exit Meeting Summary (87121)**

A preliminary site exit briefing was conducted with the Radiation Safety Officer at the conclusion of the onsite portion of the inspection. In-office reviews necessitated a follow-up telephone call with the Radiation Safety Officer on October 23, 2006. A final exit meeting was conducted telephonically with the Kakivik President/CEO on January 3, 2007, to review the findings as presented in this report. The licensee acknowledged the inspector's findings. No proprietary information was identified.

ENCLOSURE 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Myrna Gardner, President/CEO - Anchorage
Jeff Arveson, Radiation Safety Officer - Anchorage
Tom Redmond, Human Resources Manager - Anchorage
Joey Labs, Radiation Safety Supervisor - Kuparuk
Mike Branch, Radiation Safety Supervisor - Kuparuk

INSPECTION PROCEDURES USED

87121 Industrial Radiography Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-35371/006-01	APV	An apparent violation involving the conduct of a source retrieval when this activity was prohibited by the NRC license
030-35371/006-02	APV	An apparent violation involving the failure to notify the NRC within 24 hours when an event in which equipment fails to function as designed, when the equipment is required by regulation or license condition to prevent exposures to radiation and radioactive materials exceeding regulatory limits

Closed

None

Discussed

None

LIST OF ACRONYMS USED

NRC	Nuclear Regulatory Commission
CFR	Code of Federal Regulations
APV	Apparent Violation
RSO	Radiation Safety Officer
INC	Industrial Nuclear Company
EA	Enforcement Action

ENCLOSURE 2

PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA

KAKIVIK ASSET MANAGEMENT

FEBRUARY 6, 2007

10:00 A.M.

ARLINGTON, TEXAS

1. INTRODUCTIONS/OPENING REMARKS - LEONARD WERT, NRC
2. ENFORCEMENT PROCESS - MICHAEL VASQUEZ, NRC
3. APPARENT VIOLATIONS & REGULATORY CONCERNS - VIVIAN CAMPBELL, NRC
4. LICENSEE PRESENTATION- KAKIVIK ASSET MANAGEMENT
5. BREAK - 10 MINUTES
6. RESUMPTION OF CONFERENCE
7. CLOSING REMARKS - KAKIVIK ASSET MANAGEMENT
8. CLOSING REMARKS - LEONARD WERT, NRC

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- CLCain
- TEHarris, MSSA
- KDFuller
- GMVasquez
- HAFreeman
- VHCampbell
- JEWhitten
- RRErickson
- JLThompson
- GLMorell, FSME
- MBurgess, FSME
- JRSchlueter, FSME
- SLMerchant, OE
- CACarpenter, OE
- RITS Coordinator
- NMIB File
- RIV File (5th Floor)
- OEMail

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