October 19, 2007

EA-07-261

Alaska Industrial X-Ray, Inc.
ATTN: Peter A. Millar
President
4047 Kingston Drive
Anchorage, Alaska 99504

SUBJECT: ORDER SUSPENDING LICENSED ACTIVITIES (EFFECTIVE IMMEDIATELY)

Dear Mr. Millar:

The enclosed Order Suspending Licensed Activities (Effective Immediately) is being issued to Alaska Industrial X-Ray, Inc. (AIX) based on an investigation that was conducted by the NRC's Office of Investigation (OI) from June 4 through October 17, 2007. Based on the evidence developed during the investigation, the NRC determined that all AIX radiographers, including your radiation safety officer, and assistants violated 10 CFR 34.41(a) by performing industrial radiographic operations at a client's facility (temporary job site) with only one qualified individual present. Use of two qualified persons observing radiographic operations provides a high level of assurance that members of the public will be prevented from entering the restricted area during those operations and risk receiving radiation exposure well in excess of regulatory limits. Also, the requirement of two individuals can further protect against high doses to either of the qualified radiographers in circumstances whereby one of them becomes incapacitated during radiographic source exposure. The evidence indicates that these activities have been occurring on numerous occasions, for a period of up to three years, posing a threat to the public health and safety. Further, the NRC notes that, on April 25, 2001, a Notice of Violation was issued to AIX for a willful violation of 10 CFR 34.41(a) at the same client facility location. This raises serious questions regarding AIX's willingness to comply with the Commission's requirements and its ability to conduct licensed activities without undue risk to the public's health and safety.

The Order requires that: (1) AIX suspend all radiographic operations authorized by its license; (2) within 24 hours following the date of the Order, AIX contact NRC Region IV and advise the NRC of the current location, physical status, and storage arrangements of any licensed material held under its license; (3) if AIX removes licensed material from locked storage, AIX notify NRC Region IV within 48 hours before removal of the licensed material; (4) AIX not receive any NRC-licensed materials while this Order is in effect; (5) AIX maintain all records related to licensed activities in their current form and not remove or alter the records in any way; and (6) within 60 days, AIX provide, in writing, specific actions that are acceptable to the NRC and that provide adequate assurance by independent means that the Licensee, if it conducts radiography activities, will comply with NRC regulations and protect the public health and safety.

Pursuant to Section 223 of the Atomic Energy Act of 1954, as amended, any person who willfully violates, attempts to violate, or conspires to violate, any provision of this Order shall be subject to criminal prosecution as set forth in that section. Violation of this order may also subject the person to civil monetary penalty.

Questions concerning this Order should be addressed to Cynthia Carpenter, Director, Office of Enforcement, who can be reached at (301) 415-2741.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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 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. The NRC also includes significant enforcement actions on its Web site at http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions.

Sincerely,

/RA/

Martin J. Virgilio
Deputy Executive Director for Materials, Waste,
Research, State, Tribal, and Compliance Programs
Office of the Executive Director for Operations

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

Enclosure:
Order Suspending Licensed Activities
(Effective Immediately)

cc w/Enclosure:
State of Alaska Radiation Control
Program Director

Questions concerning this Order should be addressed to Cynthia Carpenter, Director, Office of Enforcement, who can be reached at (301) 415-2741.

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State of Alaska Radiation Control
Program Director

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	Docket No. 030-10346
Alaska Industrial X-Ray, Inc.	)	License No. 50-16084-01
Anchorage, Alaska	)	EA-07-261

ORDER SUSPENDING LICENSED ACTIVITIES
(EFFECTIVE IMMEDIATELY)

I

Alaska Industrial X-Ray, Inc., (AIX or Licensee) is the holder of NRC License No. 50-16084-01 issued by the Nuclear Regulatory Commission (NRC or Commission) pursuant to 10 CFR Part 34. The license authorizes the Licensee to conduct industrial radiography at temporary job sites anywhere in the United States where the NRC maintains jurisdiction for regulating licensed material. The license was issued on October 24, 1990, was most recently renewed on March 13, 2001, and is due to expire on March 31, 2011.

II

On June 4, 2007, the NRC's Office of Investigation (OI) initiated an investigation into AIX's activities at a facility, not owned by AIX, located in Anchorage, Alaska. This off-site facility is owned by an AIX client, and AIX has been performing radiography at that location since the 1990s. Based on information obtained during the investigation, serious concerns were identified concerning the AIX senior managers' oversight of licensed activities and AIX's ability to protect the public health and safety. Specifically, AIX radiographers, including the company Radiation Safety Officer, knowingly conducted radiography activities without the two individuals required by 10 CFR 34.41(a) (sometimes called the 2-person rule). This occurred on numerous instances over a period of up to three years and presented unnecessary risk to the public health and safety.

In the 1990s, AIX constructed a facility that was referred to as a “vault” at its client’s facility. AIX applied to the NRC to have the “vault” approved as a Permanent Radiographic Installation as described in 10 CFR 34.33. Radiography conducted in an authorized permanent radiographic installation could be conducted with a single radiographer; otherwise, 10 CFR 34.41(a) requires, in part, that at least two qualified individuals be present during radiography. However, the NRC never approved the “vault” as a Permanent Radiographic Installation because of serious deficiencies in the design and requested further information from AIX. One of the design deficiencies was that the “vault” had very little shielding on most of the front of the vault; the shielding consisted of a lead-lined steel frame gate that was only about 3 ½ feet tall and an industrial tarp that was pulled across the front. As such, AIX estimated radiation exposures 20 feet in front of the “vault” exceeded many hundred times the NRC’s 2 mR/hr limit. In addition, the NRC believes there was access to the roof of the facility, which was made of ¾ inch plywood (very limited shielding material), resulting in dose rates in excess of the NRC’s 2 mR/hr limit. The licensing action was closed in 2002 after AIX did not make the structural changes necessary to obtain approval.

The investigation revealed that on numerous occasions over a period of up to three years, AIX would send two qualified individuals to the off-site facility to perform radiography, and that AIX would commence radiography in compliance with 10 CFR 34.41(a). However, AIX radiographers, including the company radiation safety officer, admitted that eventually, one individual would return to the company’s shop (located several miles away) to develop film; while the remaining radiographer continued with radiography operations, without the second qualified individual, unnecessarily endangering the public health and safety. In addition, one

radiographer admitted to performing radiography activities without the second qualified individual, at a second facility owned by the licensee, several times over the past year, also in violation of 10 C.F.R. 34.41(a). The company president stated he had “an inkling of what was going on” and that he “suspected it.” All individuals interviewed justified the violation due to the additional safeguards that had been installed at the “vault” which AIX had attempted to gain NRC approval as a Permanent Radiographic Installation. However, as noted above, the “vault” was not approved by the NRC and was therefore not adequate to ensure the protection of the public health and safety; without NRC approval of this facility the licensee is required to follow 10 C.F.R. § 34.41(a). Use of two qualified persons observing radiographic operations provides a high level of assurance that members of the public will be prevented from entering the restricted area during those operations and risk receiving radiation exposure well in excess of regulatory limits. Also, the requirement of two individuals can further protect against high doses to either of the qualified persons in circumstances whereby one of them becomes incapacitated during radiographic source exposure.

The NRC notes that enforcement action was taken against AIX on April 25, 2001 (EA-01-015) for a willful failure to follow 10 CFR 34.41(a), while conducting radiography at the same off-site facility. During an OI investigation in 2000, a radiographer admitted he did not always follow the 2-person rule on limited occasions at this same “vault” that AIX had constructed. At the time of the predecisional enforcement conference, AIX was trying to get the “vault” approved as a Permanent Radiographic Installation. The company president and the company radiation safety officer attended the predecisional enforcement conference with AIX on March 13, 2001. A central issue was that the “vault” was not approved as a permanent radiographic installation,

and so the radiographer's actions were in violation of 10 CFR 34.41(a). The NRC's April 25, 2001, letter also made this point, and a Notice of Violation was issued to AIX for the violation of 10 CFR 34.41(a). AIX's corrective actions were provided by letters dated February 25, 2001, and March 12, 2001.

The NRC is continuing its review of the information obtained through the investigation. However, based on the information gathered thus far, the NRC has serious concerns about the potential safety consequences inherent in not complying with regulatory requirements during radiography activities. Such activities are among the most risk-significant activities conducted by material licensees and, in the absence of appropriate controls, may lead to significant radiation exposures to individuals. The deficiencies in the design of the "vault" raised numerous questions and did not meet NRC requirements for designation as a Permanent Radiographic Installation. As such, the NRC is concerned that a member of the public could unknowingly be exposed as a result of AIX's failures to follow the 2-person rule. In addition, the NRC has found that AIX radiographers, including the radiation safety officer, have violated 10 CFR 34.41(a) on numerous instances for a period of up to three years, and that the company president, who at a minimum suspected violations were occurring, did not take appropriate actions to stop them. In addition, the NRC had previously issued an escalated enforcement action to AIX for a willful violation of the same regulation at the same location. This conduct undermines the trust the NRC had placed in AIX's senior officials.

III

Consequently, in light of the above, I lack the requisite reasonable assurance that the Licensee's current operations can be conducted under License No. 50-16084-01 in compliance with the Commission's requirements and that the health and safety of the public, including the Licensee's employees, will be protected. Therefore, the public, health, safety and interest require that License No. 50-16084-01 be suspended in part and that licensed material be placed in locked, safe storage, pending further review of the information in this case. Furthermore, pursuant to 10 CFR 2.202, I find that the significance of the violation and conduct described above is such that the public health, safety and interest require that this Order be immediately effective.

IV

Accordingly, pursuant to Sections 81, 161b, 161i, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 34, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

A. The authority to perform radiographic operations under License No. 50-16084-01 is hereby suspended pending further notice by the NRC. The Licensee shall cease all radiographic operations and return all byproduct material possessed under this license to locked, safe storage at the Licensee’s facilities. All other requirements of the License and applicable Commission requirements, including those in 10 CFR Part 20 remain in effect.

B. Within 24 hours following issuance of this Order, the Licensee shall contact Mr. Leonard Wert, Director, Division of Nuclear Materials Safety, NRC Region IV, or his designee, through the NRC Operations Center at telephone number (301) 816-5100, and advise him of the current location, physical status, and storage arrangements of licensed material. A written response documenting this information shall be submitted, under oath or affirmation, to the Regional Administrator, US NRC Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011 within seven days of the date of this Order.

C. If the Licensee removes licensed material from locked storage, the Licensee shall notify NRC Region IV no less than 48 hours before removal of the licensed material. This notice shall be provided to Mr. Leonard Wert, Director, Division of Nuclear Materials Safety, or his designee, at telephone number (817) 860-8106.

D. The Licensee shall not receive any NRC-licensed material while this Order is in effect.

E. All records related to licensed activities shall be maintained in their current form and must not be altered in any way.

F. Within 60 days of the date of this Order, the Licensee shall provide, in writing, specific actions that are acceptable to the NRC and that provide adequate assurance by independent means that the Licensee, if it conducts radiography activities, will comply with NRC regulations.

The Regional Administrator, Region IV, may, in writing, relax or rescind this order upon demonstration by the Licensee of good cause.

V

In accordance with 10 C.F.R. 2.202, the Licensee must, and any other person adversely affected by this Order may, submit an answer to this Order within 20 days of its issuance. In addition, the Licensee and any other person adversely affected by this Order may request a hearing on this Order within 20 days of its issuance. Where good cause is shown, consideration will be given to extending the time to answer or request a hearing. A request for extension of time must be directed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, and include a statement of good cause for the extension.

A request for a hearing must be filed in accordance with the NRC E-Filing rule, which the NRC promulgated in August, 2007, 72 Fed. Reg. 49,139 (Aug. 28, 2007). The E-Filing process requires participants to submit and serve documents over the internet or, in some cases, to mail copies on electronic optical storage media. Participants may not submit paper copies of their filings unless they seek a waiver in accordance with the procedures described below.

To comply with the procedural requirements associated with E-Filing, at least five (5) days prior to the filing deadline the requestor must contact the Office of the Secretary by e-mail at HEARINGDOCKET@NRC.GOV, or by calling (301) 415-1677, to request (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any NRC proceeding in which it is participating; and/or (2) creation of an electronic docket for the proceeding (even in instances when the requestor (or its counsel or representative) already holds an NRC-issued digital ID

certificate). Each requestor will need to download the Workplace Forms Viewer™ to access the Electronic Information Exchange (EIE), a component of the E-Filing system. The Workplace Forms Viewer™ is free and is available at http://www.nrc.gov/site-help/e-submittals/install-viewer.html . Information about applying for a digital ID certificate also is available on NRC's public website at http://www.nrc.gov/site-help/e-submittals/apply-certificates.html .

Once a requestor has obtained a digital ID certificate, had a docket created, and downloaded the EIE viewer, it can then submit a request for a hearing through EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public website at http://www.nrc.gov/site-help/e-submittals.html . A filing is considered complete at the time the filer submits its document through EIE. To be timely, electronic filings must be submitted to the EIE system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The EIE system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request is filed so that they may obtain access to the document via the E-Filing system.

A person filing electronically may seek assistance through the "Contact Us" link located on the NRC website at http://www.nrc.gov/site-help/e-submittals.html or by calling the NRC technical

help line, which is available between 8:30 a.m. and 4:15 p.m., Eastern Time, Monday through Friday. The help line number is (800) 397-4209 or locally, (301) 415-4737.

Participants who believe that they have good cause for not submitting documents electronically must file a motion, in accordance with 10 C.F.R. 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format. Such filings must be submitted by (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville, Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket which is available to the public at http://ehd.nrc.gov/EHD_Proceeding/home.asp , unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, Participants are requested not to include copyrighted materials in their works.

If a person other than the Licensee requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 C.F.R. 2.309(d).

If a hearing is requested by a Licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearings. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained. Pursuant to 10 CFR 2.202(c)(2)(i), the Licensee, or any other person adversely affected by this Order, may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error. In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section IV above shall be final 20 days from the date of this Order without further order or proceedings. If an extension of time for requesting a hearing

has been approved, the provisions specified in Section IV shall be final when the extension expires if a hearing request has not been received. AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Martin J. Virgilio
Deputy Executive Director for Materials, Waste,
Research, State, Tribal, and Compliance Programs
and Compliance Programs
Office of the Executive Director for Operations

Dated this 19th day of October, 2007