

May 26, 2016

EA-16-080

Mr. Mike Rose  
Industrial Nuclear Company, Inc.  
14320 Wicks Blvd.  
San Leandro, CA 94577

SUBJECT: FAILURE TO PROPERLY NOTIFY U.S. NUCLEAR REGULATORY COMMISSION  
IN ADVANCE OF EXPORT SHIPMENT AND NOTICE OF VIOLATION

Dear Mr. Rose:

This letter refers to the October 22, 2015, export from California to Canada wherein the Industrial Nuclear Company, Inc. (INC) exported two Category 2 quantities of iridium-192 (Ir-192) without notifying the U.S. Nuclear Regulatory Commission (NRC). The quantities of Ir-192 were 688.53 and 707.92 curies (25.48 and 26.20 terabecquerels, respectively) at the time of the shipment. Title 10 of the *Code of Federal Regulations* (10 CFR), Section 110.50(c) requires, in part, that a licensee authorized to export or import the radioactive material listed in Appendix P to 10 CFR Part 110 is responsible for notifying the NRC and, in cases of exports, the government of the importing country in advance of each shipment. A final telephonic exit briefing was conducted with you on February 29, 2016.

On October 22, 2015, INC exported two transport casks, each containing one Ir-192 source, and mistakenly labeled the containers as "EMPTY." As a result, neither the NRC nor Canada (the importing country) was properly notified in advance of the shipment.

Based on the information developed during our review of these activities, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation involved INC's failure to properly submit an advanced notification as required by 10 CFR 110.50(c). The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is available on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation is cited in the enclosed Notice of Violation (Notice) because all of the criteria in Section 2.3.2 on the NRC Enforcement Policy were not met in that INC did not identify the violation. The failure to provide the advanced notification to NRC is significant because it inhibits the process of regulatory oversight.

This event is also the subject of an investigation by the U.S. Department of Transportation (DOT). Both NRC and DOT have respective responsibilities and activities related to the secure transportation of radioactive materials within the U.S. or across U.S. borders. NRC and DOT have a Memorandum of Understanding in place to ensure a coordinated agency effort in the protection of workers and to avoid duplication of effort. The DOT investigation is still ongoing.

The NRC has concluded that information regarding: (1) the reason for the violation(s); (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 on the docket in the Corrective Action Plan and summary of events submitted to the NRC on May 11, 2016. The corrective actions include double checking of paperwork as well as surveys of containers; implementation of safety procedures; and review of the radiation safety program by a lead auditor. 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.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosures and your response will be made available electronically for public inspection in the Public Document Room or from the NRC's document system Agencywide Documents Access and Management System accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Please contact Andrea Jones at (301) 415-2309, if you have any questions regarding this matter.

Sincerely,

*/RA/*

David L. Skeen, Deputy Director  
Office of International Programs

Enclosure:  
Notice of Violation

cc: State of California

The NRC has concluded that information regarding: (1) the reason for the violation(s); (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 on the docket in the Corrective Action Plan and summary of events submitted to the NRC on May 11, 2016. The corrective actions include double checking of paperwork as well as surveys of containers; implementation of safety procedures; and review of the radiation safety program by a lead auditor. 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.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosures and your response will be made available electronically for public inspection in the Public Document Room or from the NRC's document system Agencywide Documents Access and Management System accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Please contact Andrea Jones at (301) 415-2309, if you have any questions regarding this matter.

Sincerely,

*/RA/*

David L. Skeen, Deputy Director  
Office of International Programs

Enclosure:  
Notice of Violation

cc: State of California

**DISTRIBUTION:**

DSkeen, OIP	BSmith, OIP	SBaker, OIP	OIP r/f
NHilton, OE	RFretz, OE	LSreenivas, OE	OE r/f

**ADAMS Accession Number: ML16145A177**

<b>OFFICE</b>	OIP	BC:ECNP/OIP	OIP	OE	DD:OIP
<b>NAME</b>	AJones	BSmith	GMiller	LSreenivas	DSkeen <i>/RA/</i>
<b>DATE</b>	3/29/16	3/29/16	3/30/16	5/ 24/16	5/26/16

**OFFICIAL RECORD COPY**

## NOTICE OF VIOLATION

Industrial Nuclear Company, Inc.  
San Leandro, California

EA-16-080

During an U.S. Nuclear Regulatory Commission (NRC) review completed on October 28, 2015, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 110.50(c) requires, in part, that a licensee authorized to export or import the radioactive material listed in Appendix P to 10 CFR Part 110 is responsible for notifying the NRC in advance of each shipment. Section 110.50(c) also requires that a licensee authorized to export radioactive material notify the government of the importing country in advance of each export shipment.

Contrary to the above, Industrial Nuclear Company (INC) failed to properly notify the NRC in advance of an export shipment as required by NRC regulations. Specifically, on October 22, 2015, INC exported two category 2 quantities of iridium-192 without notifying the NRC. The quantities of Ir-192 were 688.53 and 707.92 curies (25.48 and 26.20 terabecquerels, respectively.) Additionally, INC failed to notify the government of Canada, in advance of the export shipment. Iridium-192 is listed in Appendix P to 10 CFR Part 110.

This is a Severity Level IV violation (NRC Enforcement Policy, Section 6.15).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved, have been adequately addressed on the docket in the Corrective Action Plan and summary of events submitted to the NRC on May 11, 2016. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, (EA-16-080)," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Director, Office of International Programs, within 30 days of the date of the letter transmitting this Notice of Violation.

If you choose to respond, your response 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>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," 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 Website 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.

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days of receipt.

Dated this 26<sup>th</sup> day of May 2016.

**cc:**

**Gonzalo Perez**, Branch Chief  
Radiologic Health Branch  
Div. of Food, Drug, & Radiation Safety  
CA Dept. of Health Services  
P.O. Box 997414, MS7610  
1500 Capitol Ave., MS 7610  
Sacramento, CA 95899-7414