



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 5, 2019

Ms. Sandra M. Kusy  
Vice President and General Manager  
Source Production & Equipment  
Company, Inc.  
113 Teal Street  
St. Rose, LA 70087

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION INSPECTION REPORT AND  
NOTICE OF VIOLATION (EA-19-059)

Dear Ms. Kusy:

On September 25, 2019, the U.S. Nuclear Regulatory Commission (NRC) conducted a “for-cause/performance-based” inspection at Source Production & Equipment Company, Inc. (SPEC) St. Rose, Louisiana. The purpose of this inspection was to determine that adequate corrective actions submitted in response to SPEC’s escalated enforcement actions cited in EA-18-116 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML 18309A273), and EA-18-170 (ADAMS Accession Nos. ML 19133A280, supplemented by ML19133A281), were implemented. Specifically, EA-18-116 identified a Severity Level (SL) III violation for the import of 100 millicuries of liquid strontium-89 into the United States (U.S.) from Russia without being authorized by a general or specific license and EA-2018-170 identified a SLIII violation for the import of 155 non-U.S. origin disused sources between 2012 and 2017, without a specific license. The inspection also revealed that sufficient management recordkeeping and procedural controls are in place to ensure that export and import activities are conducted in accordance with the requirements contained in Title 10 of the *Code of Federal Regulations* (10 CFR).

The enclosed report presents the results of the inspection, which were discussed with you and members of your staff during an exit meeting held at the conclusion of the inspection on September 25, 2019. Areas examined during the inspection include: organization and scope of the program, escalated enforcement history and corrective actions, import and inventory of sealed sources, files management, and recordkeeping. The inspection also consisted of selective examinations of procedures and interviews with management and staff.

Based on the results of the inspection, the NRC determined that the root causes of the aforementioned escalated enforcement actions have been identified, their generic implications have been addressed, and SPEC’s programs and practices have been enhanced to prevent recurrence. The NRC staff concluded that immediate and long-term corrective actions provide reasonable assurance that similar events will not occur in the future.

During the inspection, staff also discussed a May 2019, NRC-identified, non-escalated violation, regarding a late import notification for the import of a Category 1 quantity of iridium-192 (Ir-192). Section 10 CFR Part 110.50(c)(4) states, in part, that a licensee authorized to export or import radioactive material listed in Appendix P to 10 CFR Part 110 is responsible for notifying the NRC in advance of each shipment. In accordance with 10 CFR 110.50(c)(4) import notifications must be received by the NRC at least 7 days in advance of each shipment. On September 6, 2019, a telephone call was conducted between Ms. Andrea Jones, of my staff, and Ms. Kristen Bond of your organization to discuss SPEC's failure to submit the import notification in a timely manner. Specifically, on May 7, 2019, SPEC's Russian customer shipped 13,400 curies of Ir-192 to the United States. On May 15, 2019, Customs and Border Protection contacted the Headquarters Operations Officer (HOO) because SPEC did not submit an advanced import notification. The HOO then contacted SPEC. After the contact, on May 20, 2019, SPEC submitted the import notification. SPEC's failure to provide timely and accurate information did not allow the NRC sufficient time to perform its review, which could have had significant implications for public health and safety or common defense and security.

Based on the information developed during the review of this activity, the NRC determined that a Severity Level IV violation of NRC requirements occurred. 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).

On May 20, 2019 (ADAMS Accession No. ML19281D489), SPEC provided a root cause analysis and determined that the cause of not having the advanced notification submitted in a timely manner was due to multiple changes to shipment, which created a delay in communication and error in SPEC's current notification process. An incident report was immediately initiated to document the required corrective action to ensure that this problem does not reoccur. SPEC immediately implemented a corrective action to enhance communication between SPEC's Regulatory, Shipping and Accounting Departments to ensure that as changes are made to each shipment, proper updates and timely advance notifications are sent as required. Personnel was trained on this requirement on May 23, 2019.

NRC does not expect a response to this Inspection Report or Notice of Violation. If you have additional information that you believe the NRC should consider, you may provide a response. 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 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 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 R. Jones at 404-997-4443, if you have any questions regarding this matter.

*/RA/*

Peter J. Habighorst  
Export Controls Nonproliferation Branch  
Office of International Programs

Enclosures:

1. Inspection Report
2. Notice of Violation

cc: Russell S. Clark  
Louisiana Department of  
Environment Quality  
Office of Environmental Compliance  
Emergency & Radiological  
Services Division  
P.O. Box 4302  
Baton Rouge, Louisiana 70821-4302

Jackie Cook, NRC, RIV

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION INSPECTION REPORT AND  
NOTICE OF VIOLATION (EA-19-059) DATED NOVEMBER 5, 2019

**DISTRIBUTION:**

OIP r/f

**ADAMS Accession Nos.: PKG ML19289C071 LTR ML19289C073 \*via e-mail**

<b>OFFICE</b>	OIP/ECNP	OE/EB*	BC:OIP/ECNP
<b>NAME</b>	AJones	JPeralta (DFurst for)	PHabighorst
<b>DATE</b>	10/16/2019	10/31/2019	11/05/2019

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## INSPECTION REPORT

### SCOPE OF INSPECTION

This export license inspection examined the adequacy of measures taken by the licensee to ensure effective recordkeeping and procedural controls are in place and assessed whether exports are conducted in accordance with the requirements contained in 10 CFR 110 and in conformance with the terms and conditions of specific licenses. The results of the inspection are summarized below.

### ORGANIZATION AND SCOPE OF PROGRAM

Source Production & Equipment Company, Inc. (SPEC) is an industrial radiography source and device manufacturing and distribution licensee and has been operation since 1974. SPEC also imports and exports radioactive materials under NRC issued licenses. SPEC possess two export licenses (PXB14b.08. and PXB14b.08) for exporting category 1 and category 2 sealed sources to various countries. SPEC typically manufactures and distributes between 180-300 sources per year, and eighty percent of SPEC business is distributed to domestic clients, while 20% serves international clients. The SPEC facility consists of administrative offices, storage area, shipping and receiving areas, and an adjoining building, which contains the hot cell where sealed sources are manufactured.

### ESCALATED ENFORCEMENT HISTORY AND CORRECTIVE ACTIONS

#### EA-18-116

On November 16, 2019, the NRC issued EA-18-116, for violation against 10 CFR Parts 110.5, 110.9(a), 110.20(a), and 110.27(a). Specifically, SPEC imported byproduct material into the United States without being authorized by a general or specific license issued under 10 CFR Part 110. Specifically, on or about May 25, 2015, SPEC imported 100 millicuries of liquid Sr-89 from Russia to its Louisiana facility, without having a possession license issued by the NRC or Agreement State (Louisiana). SPEC's Louisiana Department of Environmental Quality Radioactive Material License authorized Sr-89 in pellet form and as sealed sources but did not authorize Sr-89 in liquid form. Therefore, the import was not authorized under the provisions of a general license.

In a letter dated October 12, 2018 (ADAMS Accession No. ML 18309A273): (1) the modification of SPEC's submitted corrective action included import/export purchasing procedures to add verification checks for appropriate domestic licensing; (2) multilateral quality assurance checks for radioactive material purchases; (3) radiation safety training for non-routine radioisotope purchases; (4) comprehensive training outlining corrective actions to prevent recurrence; and (5) organizational emphasis on the importance of maintaining a safety culture environment thereby enabling staff to identify potential 10 CFR Part 110 violations.

Based on interviews and document reviews, the staff determined that the corrective action have been implemented, and the root causes of these enforcement actions provide reasonable assurance that similar events will not occur in the future.

## EA-18-170

On June 3, 2019, SPEC received a Severity Level III violation (EA-18-170) against 10 CFR Parts 110.5, 110.9, 110.20(a), and 110.27(c). Specifically, between 2012 and 2017, SPEC failed to obtain a specific license authorizing the import of material not covered by the NRC general licenses described in 10 CFR Parts 110.21 through 110.27. SPEC imported 155 non-U.S. origin disused sealed sources containing the byproduct material (iridium-192, selenium-75, and ytterbium-169) into the U.S. without a specific license as required by 10 CFR 110.20(a).

In SPEC's letter dated April 1, 2019, as supplemented by correspondence dated May 1, 2019, SPEC submitted corrective action included: (1) informing SPEC's foreign sealed source customers of the conditions under which SPEC will authorize import of sealed sources for disposal, including the exchange of sealed sources on a one-for-one basis in accordance with NRC's Branch Technical Position (BTP), "Branch Technical Position on the Import of Non -U.S. Origin Radioactive Sources", published August 28, 2013 (ADAMS Accession No. ML 13177A163); (2) developing and implementing processes to monitor sealed source imports, which include a procedure to determine shipment eligibility prior to import; (3) revising its internal work instructions to reflect the NRC's policy on the import of non-U.S. origin disused sealed sources; (4) conducting training of its shipping and receiving personnel to ensure proper knowledge of NRC's requirements for the import of non-U.S. origin disused sealed sources; and (5) re-emphasizing to all SPEC personnel that concerns regarding compliance with the NRC and other regulatory agencies' rules and regulations should be promptly brought to the attention of senior management.

Based on interviews and document reviews, the staff determined that the corrective action have been implemented, and the root causes of this enforcement action provide reasonable assurance that similar events will not occur in the future.

## IMPORT AND INVENTORY OF SEALED SOURCES

During the course of the inspection, the inspectors reviewed inventory and other documentation supporting the export of byproduct material, as authorized under export licenses PXB14b.08 and PXB14b.08. NRC staff also interviewed licensee staffs responsible for documenting the import and export of sealed sources and determined that they were knowledgeable of the regulations governing the import and export of sealed sources, as well as the guidance in NRC BTP on the Import of Non-U.S. Origin Radioactive Sources. SPEC utilizes a database to track the import and export of sealed sources and the corresponding country of origin. NRC staff reviewed inventory files from 2018 to present and found the documentation within those files to be complete.

## FILES MANAGEMENT

NRC staff examined the adequacy of measures taken by the licensee to ensure effective recordkeeping (including advanced notifications and export notifications) and procedural controls are in place, and determined that since the issuance of EA-18-116 and EA-18-170, imports and exports of radioactive sources have been conducted in accordance with the requirements contained in 10 CFR 110 and in conformance with the terms and conditions of specific licenses. During interviews and document reviews, NRC staff determined that the licensee maintained the required records and that the records were readily available for inspection as required by 10 CFR Part 110.53(b).

CONCLUSION

NRC staff reviewed records and interviewed licensee staff in order to evaluate the effectiveness of corrective actions stemming from EA-18-116 and EA-18-170. Staff determined that management has assigned responsibility for implementing corrective actions, including necessary changes in procedures and practices. Additionally, staff concluded that immediate and long-term corrective actions to provide reasonable assurance that similar events will not occur in the future.

PARTIAL LIST OF PERSONS CONTACTED

Sandra M. Kusy	Vice-President and General Manager
Lisa Tullos	Executive Assistant
Steven Johnson	Technical Director and Assistant RSO
Michael Sanchez	Director of Finance & Administration
Jaclyn Hillerich	Director of Marketing & Project Management
Nathan Gorbach	Fulfillment Manager
John Hillerich	Production Manager
Kristen Bonds	Regulatory Manager
Darrion McGee	International Fulfillment Specialist

## NOTICE OF VIOLATION

Source Production & Equipment Company, Inc.  
St. Rose, LA

EA-19-059

During a U.S. Nuclear Regulatory Commission (NRC) review, completed on May 20, 2019, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 *Code of Federal Regulations* (10 CFR) 110.50(c)(4) states, in part, that import notifications must be received by the NRC at least 7 days in advance of each shipment.

Contrary to the above, on or before May 1, 2019, Source Production and Equipment Co. (SPEC) failed to submit an import notification for an Iridium-192 shipment at least 7 days in advance of the shipment. Specifically, on May 7, 2019, SPEC imported 13,400 curies of Ir-192 and the corresponding import notification was not received until May 20, 2019.

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, is adequately addressed in your April 1, 2019 and May 1, 2019 letters. 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, if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation; EA-19-059" and send it to the NRC, 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.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

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>. 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. If personal privacy or proprietary information is necessary to provide an acceptable response, then 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 material, 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). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21. If Classified Information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR Part 95.

Enclosure 2

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

Dated this 5<sup>th</sup> day of November 2019.