



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713

October 25, 2017

EA-17-144

Chavonda Jacobs-Young, Ph.D.,
Administrator
U. S. Department of Agriculture,
Agricultural Research Service
Jamie L. Whitten Building, Room 302A
1400 Independence Ave., S.W.
Washington DC 20250

SUBJECT: AGRICULTURAL RESEARCH SERVICE (ARS), US DEPARTMENT OF
AGRICULTURE (USDA) - NRC SPECIAL INSPECTION NO.
99990001/2017003 AND NOTICE OF VIOLATION

Dear Dr. Jacobs-Young:

This letter refers to the inspection conducted from April 4 through October 3, 2017, related to the transfer of a general license device from the Small Grains and Potato Germplasm Research facility, ARS, USDA, at Aberdeen, Idaho. This inspection examined activities under the general license as they relate to public health and safety, and was conducted to confirm compliance with the Commission's rules and regulations. Within these areas, the inspection consisted of a selected examination of procedures and representative records, and interviews with personnel.

In March 2017, NRC learned that a liquid scintillation counter (LSC) had been sold as "excess equipment" and ownership of the LSC might have been transferred from the Aberdeen, Idaho facility of ARS to an unauthorized individual. The Aberdeen, ID facility was authorized for use of unsealed licensed material by permit from the Radiation Safety Division in the USDA Office of Homeland Security and Emergency Coordination, under NRC specific license 19-00915-03. NRC contacted Mr. John Jensen, USDA Radiation Safety Officer (RSO) for that specific license and requested that he review the circumstances that allowed radioactive material to be transferred. Mr. Jensen performed an investigation at the Aberdeen, Idaho site on April 19 and 20, 2017, and interviewed laboratory and administrative personnel at the facility. NRC discussed the findings of the USDA investigation with Mr. Jensen on May 5, 2017, and Mr. Jensen provided additional information to the NRC regarding the review.

As part of the investigation, the RSO interviewed USDA staff involved in LSC use at the Aberdeen, Idaho facility, including the facility manager and researcher responsible for maintaining the LSC. The researcher and the laboratory Administrative Officer had conducted a review of laboratory equipment in November 2016, which included the LSC among 10 -15 items identified as excess property. In December 2016, the LSC along with other equipment were placed on GSA's auction site for sale to the general public.

From interviews, the RSO found that the LSC was made available for public sale by ARS, but should have been excluded due to radioactive material installed in the device. The LSC was originally purchased by a former researcher at the Aberdeen facility in 1998, and continued to be used there under a Nuclear Regulatory Commission general license, subject to the

requirements of 10 CFR 31.5. The device was determined to be a Packard Tri-Carb 1600TR LSC (Model Number A210000, Serial Number 419911), with a Ba-133 source installed. From the investigation, the RSO concluded that USDA had transferred the LSC with the source to an individual who was not authorized to possess or use the device, contrary to the requirements of 10 CFR 31.5(c)(8).

USDA took immediate follow up actions to retrieve the LSC and source, regaining control of the device on April 20, 2017. Mr. Jensen stated that the source would be properly transferred or disposed of in accordance with 10 CFR 31.5 requirements. As a result of the RSO's investigation, USDA plans to notify laboratory managers and researchers, property management, and administrative officers at USDA locations where comparable devices might be located of the NRC general license transfer and disposal requirements. In addition, the USDA Radiation Safety Division will emphasize proper LSC disposal procedures during internal radiation safety program inspections conducted to comply with NRC License No. 19-00915-03.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at (<http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>). The violation involved the failure to transfer or dispose of devices containing byproduct material only by the authorized means specified in 10 CFR 31.5(c)(8)(i). The violation is cited in the enclosed Notice of Violation because it was identified by the NRC.

In addition to the LSC device recovered from the Aberdeen, Idaho facility, review of NRC records of devices subject to 10 CFR 31.5 includes listings which show that at least 420 other GL devices are possessed by USDA sub-agencies, including 111 GL devices under ARS. As additional corrective action, USDA and ARS agreed to communicate with staff personnel who purchased or use these devices to remind them of their responsibilities relative to transfer and disposal under the 10 CFR 31.5.

An exit meeting teleconference was held on October 3, 2017, with you and Todd Jackson of NRC. Also participating from USDA in that meeting were John Jensen, USDA RSO; Thomas Shanower, Ph. D., Chairman - USDA Radiation Safety Committee; Simon Liu, Ph.D.; Joshua Bornstein; Robert Matteri, Ph.D.; John Bonman, Ph.D.; and Peter Jovanovich. During that teleconference you affirmed that appropriate controls are in place for the other General License materials possessed by ARS facilities, and that ARS will reinforce with responsible staff the requirements of the General License in 10 CFR 31.5. You stated that ARS and other impacted USDA agencies would identify devices possessed that are subject to the General License requirements, and improve the administrative controls necessary to ensure that devices containing radioactive material are identified and transferred properly.

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 as described above in this letter. Therefore, you are not required to respond to this letter unless the description herein 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 "Rules of Practice," a copy of this letter and your response, if you choose to provide one, will be made available electronically for public

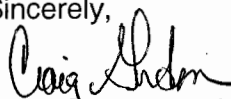
inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's Web Site at www.nrc.gov; select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Regulations, Guidance and Communications**. The current Enforcement Policy is included on the NRC's Web Site at www.nrc.gov; select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents**; then **Enforcement Policy (Under 'Related Information')**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

If you have any questions regarding this matter, please contact Todd Jackson of my staff at 610-337-5308 or via electronic mail at Todd.Jackson@nrc.gov.

Thank you for your cooperation.

Sincerely,



Craig Gordon, Acting Chief
Commercial, Industrial, R&D
and Academic Branch
Division of Nuclear Materials Safety
Region I

Docket No. 9999001
License No. General License

Enclosure:
Notice of Violation

cc w/ Encl: John Jensen, RSO, USDA
Thomas Shanower, Ph. D., USDA
John Bonman, Ph.D.
State of Idaho

NOTICE OF VIOLATION

Small Grains and Potato Germplasm Research
Agricultural Research Service
US Department of Agriculture
Washington, DC

Docket No. 99990001
General License
EA-17-144

During an NRC inspection beginning on April 4, 2017, and continuing in-office through October 3, 2017, one violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 31.5(c)(8)(i) requires, in part, that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license, shall transfer or dispose of the device containing byproduct material only by export as provided by paragraph (c)(7) of this section, by transfer to another general licensee as authorized in paragraph (c)(9) of this section, or to a person authorized to receive the device by a specific license issued under parts 30 and 32 of this chapter, or part 30 of this chapter that authorizes waste collection, or equivalent regulations of an Agreement State, or as otherwise approved under paragraph (c)(8)(iii) of this section.

Contrary to the above, on an unspecified date prior to March 2017, the Small Grains and Potato Germplasm Research facility, Agricultural Research Service (ARS), US Department of Agriculture, failed to transfer or dispose of a device containing byproduct material only by the authorized means specified in 10 CFR 31.5(c)(8)(i). Specifically, ARS failed to transfer a liquid scintillation counter containing 18.8 microcurie Ba-133 by the authorized means specified in the requirements in 10 CFR 31.5, by transferring it to a member of the public who was not authorized to receive it.

This is a Severity Level IV violation (Enforcement Policy Section 6.7)

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 will be achieved is already adequately addressed on the docket. 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," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response which contests an enforcement action shall be submitted under oath or affirmation.

Your response, should you choose to provide one, will be placed in the NRC Public Document Room (PDR) and on the NRC Web site. To the extent possible, it should, therefore, not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

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

Dated This 25th day of October, 2017