

September 29, 2006

TO: Licensees Authorized to Possess Certain Sources of Radioactive Material

SUBJECT: RESPONSE REQUESTED - DATA FOR UPDATING THE INTERIM INVENTORY OF RADIOACTIVE SOURCES

The U.S. Nuclear Regulatory Commission (NRC), with the assistance of the Agreement States, is maintaining an interim inventory of certain sources of radioactive material. The inventory has been conducted annually for three years. In the three previous inventories, the minimum activity for the sources to be reported was the International Atomic Energy Agency (IAEA) Category 2 threshold for the applicable radionuclides. For this inventory, the minimum activity has been reduced to a Category "3.5" threshold (one-hundredth of the Category 2 thresholds, as defined below). This will result in an increase in the number and types of licensees to be contacted and may result in an increase in the number of sources to be reported by licensees contacted in prior inventories. To perform the inventory, we need data on certain sources that you may currently possess, or your statement that you do not possess any such sources. Your response to this source inventory survey is requested within 30 days of receipt of this letter.<sup>1</sup>

BACKGROUND:

The events of September 11, 2001, heightened the Nation's concerns about the possible use of radioactive material for malevolent acts. In June 2002, the Secretary of Energy and the NRC Chairman met to address these concerns. In May 2003, the U.S. Department of Energy (DOE) and the NRC Working Group (WG), convened to study these concerns, issued its report. The WG generated a list of radionuclides and thresholds above which tracking of the sources was recommended. The recommendations concerning source tracking are available on the Internet at: <https://homer.ornl.gov/nrc/nrc-doerddrpt.pdf>. A similar study, undertaken by the IAEA, created a list of radionuclides and thresholds much the same as the DOE/NRC list. The IAEA defined a source categorization scheme that is incorporated in the *Code of Conduct for the Safety and Security of Radioactive Sources* (January 2004). This document is available at: <https://homer.ornl.gov/nrc/codeofconductenglish.pdf>.

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<sup>1</sup> This information request has been approved under the following Office of Management and Budget (OMB) clearances, OMB 3150-0029, expiration 6/30/07 and OMB 3150-0011, expiration 2/28/07. The estimated burden per response to comply with this voluntary collection is approximately three hours. Forward any comments on the burden estimate to the Information and Records Branch (T-6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0029, 3150-0011), Office of Management and Budget, Washington, DC 20503. If a document does not display a currently valid OMB control number, NRC may not conduct nor sponsor, and a person is not required to respond to, a collection of information.

NRC has adopted the IAEA methodology and established the Category 2 threshold for certain radionuclides as the level for implementation of several new actions (see Enclosure 1 for the list of nuclides and their Category 2 thresholds) in support of international cooperation on source tracking. On December 28, 2005, new import/export regulations concerning these sources became effective. Later this year, NRC will publish the final rule for a new National Source Tracking System (NSTS) to track radioactive sources at or above the IAEA Category 2 thresholds. The rule and implementation of the NSTS will become effective in 2007. Also, NRC and Agreement States have recently established new security measures for licensees authorized to possess Category 2, or greater, quantities of material.

#### DISCUSSION:

Until the NSTS is implemented, the Commission directed that NRC and the Agreement States maintain an interim inventory of sources at or above the IAEA Category 2 threshold. This inventory has been updated annually by querying all licensees authorized to possess these sources. The first round of requests was issued between November 2003, and October 2004, and the response provided a "snapshot" of sources possessed at the time of the query response. The first round included aggregated amounts (individual sources below the threshold, which sum to a total above a threshold) and asked about source import/export and disposition plans. The next two rounds, performed in fiscal year (FY) 2005, and FY 2006, were similar but did not include aggregation nor ask about plans for import/export or source disposition.

On June 9, 2006, the Commission directed the performance of an information collection on sources at, or above, an activity that is much lower than the previous thresholds. Specifically, NRC and the Agreement States were directed to collect data on sources at, or above, a threshold identified as Category "3.5." The IAEA defines Category 3 as one-tenth of Category 2. The IAEA defines Category 4 as one-hundredth of Category 3. The Commission has defined Category "3.5" as one-tenth of Category 3, or one-hundredth of Category 2.

As a result, NRC and the Agreement States have updated the inventory with lists of licensees authorized to possess radionuclides on the IAEA list in sources or quantities that are at or above the new Category "3.5" threshold. All licensees on the updated list will be contacted. If licensees previously acknowledged possessing sources, they will be provided their previous data and asked to update them. If the licensees do not possess any sources, they will be asked to state this in their responses. As before, the information will represent the instant in time, a "snapshot," when the licensees respond. The data will generally be available only to NRC and the Agreement States. Some data may be shared with other Federal agencies, including DOE and the Department of Homeland Security, to assist with their roles in source security.

The purposes for continuing the inventory are:

- To maintain an inventory of the sources at or above the Category 2 threshold and feed these data to the NSTS in 2007;
- To maintain or establish contact with the licensees that will participate in the system;
- To provide specific information on the number, types, general uses, and geographic locations of sources in use;
- To plan for the possible expansion of the NSTS, to include Category 3 sources; and
- To evaluate the effect of limiting generally licensed devices to a maximum activity of Category "3.5."

RESPONSE REQUESTED:

Enclosure 2 provides information on the new Category "3.5" threshold values for the radionuclides of interest and the types of information being requested. As before, Oak Ridge National Laboratory (ORNL) will collect the inventory information for NRC. Instructions on how to provide the data are enclosed (Enclosure 3). If you provided any data in the previous response, those data are displayed when you log in, using the provided user name and password. You are requested to follow the instructions and update any prior data. If you do not possess any sources at or above the applicable threshold, please follow the instructions to positively indicate this. Data collection is through a secure Internet web site.

Although the Category "3.5" threshold could include devices that are usually generally licensed under current regulations, you do not need to include any of these devices in this inventory unless they are included on your specific license. NRC will obtain data on devices being operated under a general license directly from the Agreement States or the General License Tracking System.

If you have any questions about policy or technical questions, please contact William Ward at (301) 415-7038 or via e-mail, [wrw1@nrc.gov](mailto:wrw1@nrc.gov). Questions on application use (how to enter the data) should be directed to Gloria Caton of ORNL at (865) 574-7759 or via e-mail, [catongm@ornl.gov](mailto:catongm@ornl.gov), or Fred Baes of ORNL, at (865) 576-2137 or via e-mail, [bae@ornl.gov](mailto:bae@ornl.gov). As noted at the beginning of the letter, we would like your response within 30 days of receipt of this letter.

Thank you for your cooperation and support of this survey.

Sincerely,

**/RA/**

Jack R. Strosnider, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. Table 1 - IAEA Category 2 Thresholds
2. Table 2 - Category "3.5" Thresholds
3. Instructions for Response

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