

June 27, 2006

The Honorable Daniel K. Akaka  
United States Senate  
Washington, D.C. 20510

Dear Senator Akaka:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to the concerns raised in your letter of April 19, 2006, regarding efforts to control and regulate sealed radioactive sources. You specifically mention the implementation of additional security and tracking measures, as NRC agreed to in its response to an August 2003 Government Accounting Office (GAO) report titled, "Nuclear Security: Federal and State Action Needed to Improve Security of Sealed Radioactive Sources" (GAO-03-804). NRC's responses to your specific questions are provided in Enclosure 1.

The NRC bases its security and control program for radioactive materials on the principle of allocating attention and resources proportionate to the risk of malevolent use of the sources. Since September 11, 2001, the NRC has thoroughly reevaluated its safeguards and security programs and worked aggressively to enhance the security of risk-significant radioactive sources. It will continue to do so. The Commission believes that significant achievements have been made in regulating the security of radioactive materials, not only in the United States, but worldwide, through the International Atomic Energy Agency (IAEA). Background information on the NRC program for regulating radioactive sources is provided in Enclosure 2. Enclosure 3 is a timeline showing actions on management and control of radioactive sources, and Enclosure 4 explains some of these actions in more detail. The Energy Policy Act of 2005 requires the NRC and other organizations to take a number of actions regarding the security of risk-significant sources. These actions are listed in Enclosure 4, Information Box 3. The NRC is taking steps to implement all of these actions.

Regarding GAO-03-208, the NRC staff carefully considered the recommendations in the report, has taken extensive measures to improve the security of sealed sources since September 11, 2001, and has made considerable progress in responding to the GAO recommendations. Specifically, NRC has worked closely with the Agreement States to identify the radioactive sources of greatest concern; developed additional security requirements, which have been issued to all licensees who possess risk-significant sources, through Orders or other legally binding instruments; worked to determine the costs and benefits of additional regulation of generally licensed sources and the appropriate delineation between general licenses and specific licenses; taken steps through the licensing process and other means to verify the trustworthiness of recipients of high-risk radioactive sources; and developed program review criteria and performance measures to evaluate the effectiveness of NRC's and the Agreement States' oversight of the implementation of additional security measures. Enclosure 5 is a copy of NRC's initial response to the recommendations of GAO-03-804. Enclosure 6 provides the most recent update on the status of recommendations that remained open as of the end of 2005. The NRC has completed actions for all recommendations in GAO-03-804 except recommendation 2, which suggests that the NRC and Agreement States determine the costs and benefits of requiring owners of devices that are now generally licensed to apply for specific

licenses. In June 2006, as part of the process of addressing recommendation 2, the NRC decided to perform a one-time data collection and analysis of radioactive sources with quantities down to 1/10th of the Category 3 threshold in the IAEA Code of Conduct. The NRC will examine this data as part of its consideration of changing the delineation between general licensing and specific licensing for byproduct materials.

The Commission firmly believes that we have acted responsibly to protect the public from the risks of exposure to radioactive material by strengthening the system for security and control of sources. As part of these actions, the NRC has implemented, or is in the course of implementing, the additional security and tracking measures identified in GAO-03-804 to which you refer in your letter. The NRC has taken measures to ensure that radioactive materials that could result in potentially significant injury to the public are safely and securely handled both here and abroad. The Commission recognizes the need to analyze continuously the safety and security systems in place and is improving its ability to analyze threats and mitigate them. Our approach is informed by the level of potential hazards to the public, recognizing the different levels of risk of different radioactive sources, and applying appropriate measures and resources.

Sincerely,

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Nils J. Diaz

Enclosures:

1. Response to Questions from Senator Daniel K. Akaka's letter dated 4/19/06
2. Overview of NRC Program for Regulating Radioactive Sources
3. Timeline on Management and Control of Radioactive Sources
4. Information Boxes
5. Letter to Rep. Davis, et al., dated 2/4/04
6. Letter to Sen. Voinovich, et al., dated 4/12/06, with Excerpts on GAO-03-804

Response to Questions from Senator Daniel K. Akaka's letter dated April 19, 2006

Question 1: What improvements have been made in the NRC's ability to authenticate the credentials of those requesting general and specific licenses?

Response: General licenses are authorizations that do not require applications nor issuances of licensing documents but, in some instances, do require registration with NRC. A specific license is necessary for certain types of radioactive material which require conditions to ensure the safe use of the material. The issue of fraudulent application for, or use of, a specific license is addressed in NRC's licensing and inspection programs. For a specific license that authorizes the use of risk-significant<sup>1</sup> sources, NRC's regulatory process for approving the use is comprehensive. It includes a thorough licensing review (supplemented in some cases by licensing site visits to verify the legitimacy of applicants and licensees), inspections that address control of sources from both safety and security standpoints, incident investigations and follow-up, and enforcement actions. NRC has also developed pre-licensing guidance with the goal of ensuring that all NRC and Agreement State regulators use a consistent review process to identify risk-significant quantities of certain radioactive materials and are reasonably assured that the materials will be used as intended. The guidance provides a mechanism, in the post-September 11, 2001 environment, for resolving concerns about issues with applicants that warrant additional security evaluations. In addition, NRC has been given new regulatory authority to require that certain licensees conduct background and criminal history checks. NRC has issued Orders imposing additional security measures to licensees with risk-significant sources and is currently initiating the rulemaking process to revise its regulations to codify these Orders.

Question 2: What improvements have been made to prevent counterfeiting of NRC documents?

Response: NRC is taking steps to address the counterfeiting issue.

NRC, in coordination with the Agreement States, has placed all licensees that possess risk-significant radioactive sources under additional security requirements. These security measures require that licensees confirm the identity of entities that seek to purchase radioactive materials and verify their authorizations.

It is important to note that shippers and carriers of radioactive material are not required to carry NRC licenses with shipments as proof of authorization to possess the material. The transfer of byproduct material between licensees is

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<sup>1</sup> As used herein, the term, "risk-significant source," refers to a sealed source that contains an amount of radioactive material that corresponds to a Category 1 or Category 2 source as defined by the International Atomic Energy Agency in its Code of Conduct for the Safety and Security of Radioactive Sources.

authorized by 10 CFR 30.41 of the NRC's regulations. Licensees are required to verify that transferee licenses authorize the receipt of the type, form, and quantity of byproduct materials to be transferred. NRC has required some manufacturer and distributor licensees, through security orders, to exercise their responsibilities to verify, at a minimum, the legitimacy of unfamiliar purchasing companies. NRC plans to issue an Information Notice to alert licensees to the due diligence that needs to be exercised should they receive orders for material from entities with which they have not previously done business.

Question 3: What progress has been made regarding the implementation of a national source tracking system? When will such a system be operational? How accurate and effective are present interim tracking systems?

Response: The National Source Tracking System (NSTS), which will focus on Category 1 and Category 2 sources initially, is under development. The first phase, with full functionality, is scheduled to be in operation by June 2007. A second phase, with additional automated features, is scheduled for deployment in June 2008. Additionally, the Commission has directed the staff to develop a proposed rule to include Category 3 sources in the NSTS.

Until the NSTS becomes operational, NRC maintains an accurate Interim Inventory of risk-significant radioactive sources (Category 1 and Category 2) licensed by NRC and the Agreement States. NRC has confidence that the inventory is complete and accurate based on 3 years of reporting experience and internal verification of the data. It has also been used to issue advisories and orders for licensee enhanced control measures. It has been used to inform the Federal Bureau of Investigation and other Federal agencies of instances where there were concerns about control of risk-significant sources, (e.g., during some law enforcement activities, or during some followup actions in the wake of Hurricanes Katrina and Rita).

Question 4: What is being done to determine precise sealed source inventories, and the total number of sources?

Response: As noted above, NRC has confidence that the Interim Inventory is complete and accurate with respect to Category 1 and Category 2 sources. In June 2006, as part of the process of addressing recommendation 2 in GAO report GAO-03-804, the NRC decided to perform a one-time data collection and analysis of radioactive sources with quantities down to 1/10th of the Category 3 threshold in the IAEA Code of Conduct. The NRC will examine this data as part of its consideration of changing the delineation between general licensing and specific licensing for byproduct materials.

NRC will issue a rule in the summer of 2006 requiring licensees to report to the NSTS when it goes into operation. This rule, and corresponding Agreement State Orders and rules, will allow NRC and the States to inspect licensees to verify numbers and possession of Category 1 and Category 2 sources.