

February 4, 2004

The Honorable Susan M. Collins  
Chair, Committee on Governmental Affairs  
United States Senate  
Washington, D.C. 20510

Dear Madam Chair:

Pursuant to 31 U.S.C. 720, I am pleased to provide, on behalf of the U.S. Nuclear Regulatory Commission (NRC), a written statement of the actions taken by NRC on the recommendations made by the General Accounting Office (GAO) in its report entitled "NUCLEAR SECURITY: Federal and State Actions Needed to Improve Security of Sealed Radioactive Sources" (GAO-03-804). GAO released this report to the public in September 2003.

We have carefully reviewed GAO-03-804 and agree with several of GAO's recommendations. We have already taken steps to implement those recommendations (in several cases implementation occurred before the GAO performed its review) as improvements in our regulatory programs. Enclosure 1 to this letter provides our responses to the specific recommendations in GAO-03-804.

As stated in our June 26, 2003 comments on the draft report (Enclosure 2), however, we believe the final report does not fully present either the current status of our efforts to improve the security of high-risk radioactive sources or the large effort we devoted to this issue prior to GAO publishing this report. This report also perpetuates one of the main weaknesses of an earlier GAO report entitled "NUCLEAR NONPROLIFERATION: U.S. and International Assistance Efforts to Control Sealed Radioactive Sources Need Strengthening," dated May 2003 (GAO-03-638), by failing to focus on high-risk radioactive sources, which are of greatest concern for malevolent use by a terrorist. We continue to believe that the level of health risk posed by the various sources should be the determining factor for application of security measures. Other factors such as psychological, social, and economic costs can vary from region to region and over time and, thus, provide a less stable measure for establishing necessary security measures.

If you have any questions or comments on our written statement, please contact me.

Sincerely,

**/RA/**

Nils J. Diaz

Enclosures:

1. Actions and comments on GAO-03-804 Recommendations
2. Letter to GAO dated June 26, 2003

cc: Senator Joseph I. Lieberman  
D. Walker, GAO  
R. Coles, GAO

Identical letter sent to:

The Honorable Susan M. Collins  
Chair, Committee on Governmental Affairs  
United States Senate  
Washington, D.C. 20510

cc: Senator Joseph I. Lieberman  
D. Walker, GAO  
R. Coles, GAO

The Honorable Thomas Davis  
Chairman, Committee on Government Reform  
United States House of Representatives  
Washington, D.C. 20515

cc: Representative Henry A. Waxman  
D. Walker, GAO  
R. Coles, GAO

ACTIONS AND COMMENTS ON REPORT RECOMMENDATIONS  
GAO-03-804

1. The report recommended that to determine the sealed sources of greatest concern, the Chairman of the NRC collaborate with the Agreement States to identify the types, amounts, and availability of the highest risk sealed sources and the associated health and economic consequences of their malicious use. In addition, it recommended that NRC and the Agreement States determine how to effectively mitigate the psychological effects of their use in a terrorist attack.

Response: NRC agrees with the benefits of working in collaboration with the Agreement States. The NRC has been working more closely with the States to enhance security of radioactive sources since October 2002. In March 2003, prompt and effective coordination between NRC and the States was essential in supporting U.S. efforts to secure the Nation against potential retaliatory attacks associated with the commencement of the liberation of Iraq (Operation Liberty Shield). In July 2003, the NRC, Organization of Agreement States (OAS), and the Conference of Radiation Control Program Directors (CRCPD) commenced the Materials Security Working Group (MSWG) and Materials Security Steering Committee (MSSC). These efforts have been productive in achieving a common understanding of the types, amounts, availability, vulnerabilities, and security enhancements for high-risk radioactive sources. As we indicated in our June 26, 2003 comments on the draft report, the Commission, together with the U.S. Department of Energy (DOE), designated the radionuclides of concern and action levels for those isotopes. We have also sought to reconcile the DOE/NRC designation of high-risk radioactive sources with the designation developed by the International Atomic Energy Agency (IAEA) in its revised "Code of Conduct on the Safety and Security of Radioactive Sources," which was adopted. The MSWG ensures close coordination in the development of additional security measures for those licensees possessing Category 1 or 2 quantities of radionuclides of concern as defined in the revised Code of Conduct (a slight variation from the DOE/NRC action levels) and other materials security issues. The Commission met with the leadership of the OAS and CRCPD on June 6, 2003, to encourage a collaborative approach.

With respect to the second part of the recommendation, it is important to recognize the NRC's mission to regulate the nation's civilian use of byproduct, source, and special nuclear material. We perform our mission through scientific and engineering evaluations of licensed activities that use radioactive materials in order to protect public health and the environment, and to promote common defense and security. As a part of our mission, we perform incident response planning and preparation, which includes anticipated communications with the public which accurately characterize any incident and its potential significance. We can best address the mitigation of the psychological effects potentially caused by malevolent use of radioactive materials by communicating openly and accurately and by continuing to address inaccurate information which finds its way into the public domain.

2. The report concluded that accountability over generally licensed devices needs to be improved and gaps in the current licensing process need to be addressed. Because new efforts will involve additional licensing and inspection of potentially thousands of licensees and devices, the report recommended the Chairman of the NRC:

- determine, in consultation with the Agreement States, the costs and benefits of requiring owners of devices that are now generally licensed to apply for specific licenses, and whether the costs are commensurate with the risks these devices present, and
- modify NRC's process of issuing specific licenses to ensure that sealed sources cannot be purchased before NRC's verification - through inspection or other means - that the materials will be used as intended.

Response: "Prior to focusing on generally licensed devices, the NRC believes that it needs to focus its efforts on cradle-to-grave controls, including export and import controls, for high-risk radioactive sources, as defined by the revised IAEA Code of Conduct. We are currently conducting an initial national inventory of over 2,500 NRC and Agreement State licensees that may possess high-risk sources to determine the number and nature of the sources in their possession. In addition, NRC is developing a system to track the roughly 200 to 250 imports and exports per year of such sources.

It should be clear that not all types of radioactive material are of concern from an RDD perspective. Most generally licensed sources contain radioactive material that either 1) does not involve radionuclides of concern, such as tritium in exit signs, or 2) is orders of magnitude below the IAEA thresholds of concern. The NRC currently requires the registration of some generally licensed devices. For example, a device is registered if its sources contain 10 millicuries of cesium-137, 0.1 millicurie of strontium-90, 1 millicurie of cobalt-60 or 1 millicurie of americium-241 or any other transuranics (10 CFR 31.5(c)(13)). These levels are, respectively, a factor of 3000; 3,000,000; 8,000; and 20,000 below the Code of Conduct thresholds for these radionuclides. At the lower end of the spectrum, these registered, generally licensed devices would pose little threat of even modest disruption, if used malevolently. There may be some limited number of registered generally licensed devices that deserve to be brought under a specific license regime. We agree with the GAO recommendation that it is worth considering the specific licensing of this limited number of generally licensed devices and that cost/benefit analysis will be useful in making a judgment on that. But this will not involve as stated in the report, "potentially thousands of licensees and devices." A very simple analysis can eliminate all but a very small number of currently generally licensed devices from consideration for the additional burden of specific licensing. We will coordinate any effort to expand specific licensing of sources involving radionuclides of concern, or to expand the registration of generally licensed sources, with the States through the MSWG.

NRC agrees with the objective of the recommendation to modify the specific license process and is establishing measures to verify trustworthiness of licensees prior to authorizing receipt of high-risk radioactive sources and other measures. These measures are being coordinated with the States through the MSWG.

3. The report concluded that to ensure the Federal and State governments' efforts to provide additional security to sealed sources are adequately integrated, the Chairman of NRC should:
- determine how officials in Agreement and non-Agreement States can participate in the development and implementation of additional security measures, and
  - include criteria and performance measures of NRC's and the Agreement States' implementation of additional security measures in NRC's periodic evaluations of its and Agreement States' effectiveness.

Response: As we indicated in our June 26, 2003, comments on the draft report and the response to Recommendation 1 above, the Commission has established an MSWG and MSSC involving both the OAS and the CRCPD to ensure close coordination in the development of additional security orders.

Since June 2003, the MSWG has diligently worked to develop additional security measures and guidance for high-risk groups of materials licensees. The NRC also coordinated these security measures with the Agreement States at the annual meeting of the OAS in October 2003. Copies of the draft security measures have been provided to the States and the licensees for comment. NRC has also conducted a series of licensee workshops to receive comments. Orders implementing additional security measures were issued in January 2004. We are now addressing the next category of high-risk radioactive materials.

NRC is implementing the additional security measures and guidance in Agreement and non-Agreement States using NRC's common defense and security authority under the Atomic Energy Act of 1954, as amended (AEA). NRC has developed a draft agreement under the provisions of section 274i of the AEA (274i Agreement) and associated temporary instruction (TI) to provide for inspections of Agreement State materials licensees, in order to verify licensee compliance with NRC orders. The draft 274i Agreement and associated TI outline how the NRC and the State will cooperate and will apply to those Agreement States desiring to participate in the inspection of these additional security measures. NRC will conduct inspections in non-Agreement States and in those Agreement States electing not to enter into a 274i Agreement. Focused security training will be provided to both NRC and State inspectors and inspection effectiveness will be maintained through NRC oversight.

Response: We agree with the recommendation to include criteria on performance measures in our periodic evaluations of Agreement State effectiveness. The NRC staff is considering a range of alternatives for how best to ensure the effectiveness of NRC and State efforts to enhance the security of radioactive sources under NRC's common defense and security authority. The NRC will initiate an evaluation program of the additional security measure implementations for the oversight of the NRC Regions and the Agreement States who choose to participate under a 274i Agreement. Work on the criteria and performance measures for performing this evaluation has started and will be coordinated with the Agreement States through the MSWG in early 2004.