

Agency News

NRC News

NRC's Reevaluation of Category 3 Source Security and Accountability

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Since the events of 9/11, the Nuclear Regulatory Commission (NRC) has been enhancing the security and accountability of radioactive sources that pose a threat to the public. These enhancements have been focused on the most dangerous sources, those with [Category 1 and 2 quantities](#) of radioactive materials. The NRC has considered expanding these enhancements to [Category 3](#) sources in the past, and in October 2016, the Commission directed the NRC staff to once again reevaluate Category 3 source security and accountability.

Category 3 sources are those containing a quantity of radioactive material equal to or greater than one-tenth of the Category 2 threshold but less than the Category 2 threshold. These sources have a wide variety of uses in industry, medicine, and research and include applications such as fixed industrial gauges, high-dose-rate brachytherapy sources, research reactor start-up sources, and certain well-logging sources.

In 2007, the Government Accountability Office (GAO) conducted an investigation ([GAO-07-1038T](#)) into the NRC's materials licensing program. Using a fictitious company, GAO was successful in one of two attempts to obtain a radioactive materials license and used the license to place orders for radioactive material. The investigation demonstrated that GAO could have acquired an aggregated Category 3 quantity of material, although at no point in the investigation were radioactive materials actually shipped to the fictitious company. After the 2007 investigation, the NRC and the Agreement States made a number of significant changes to strengthen the licensing and regulatory processes to prevent individuals who have malevolent intent from obtaining a radioactive materials license.

In January 2009, licensees began reporting Category 1 and 2 source information to the [National Source Tracking System](#) (NSTS). In June 2009, NRC staff requested approval of the final rule amending 10 CFR Parts 20 and 32 to expand reporting to the NSTS to include Category 3 sources ([SECY-09-0086](#)). In June 2009, the Commission did not reach a decision on the proposed rulemaking (2-2 split vote), and the final rule was not approved ([SRM-SECY-09-0086](#)).

In 2014, the GAO initiated another audit of the materials licensing program to determine whether the licensing vulnerabilities identified in its 2007 investigation had been addressed by the NRC and Agreement States. As part of its audit, GAO conducted an investigation that went beyond the 2007 investigation in its sophistication and planning—GAO rented storefront/warehouse space to demonstrate the fictitious company's legitimacy during preclicensing visits. The GAO was successful in one of three attempts and acquired a license for a Category 3 well-logging source. GAO then placed an order for one Category 3 source, then altered the license and placed an order for a second Category 3 source. The investigation demonstrated that GAO could have acquired an aggregated Category 2 quantity of material, although at no point were radioactive materials actually shipped to the fictitious company. Notified by GAO in October 2015, the NRC and Agreement States took a number of actions, including forming two NRC-Agreement State working groups to evaluate vulnerabilities identified by the investigation. Specifically, one of the working groups evaluated the need for enhancements to existing requirements for license verification and source tracking beyond Category 1 and Category 2 thresholds.

On 15 July 2016, the GAO published its final report for the material licensing audit and investigation, [GAO-16-330](#), titled "Nuclear Security: NRC Has Enhanced the Controls of Dangerous Radioactive Materials, but Vulnerabilities Remain." The report made three recommendations to enhance the security of Category 3 materials.

The NRC-Agreement State working groups completed their reports and recommendations in October 2016, and a steering committee evaluated their recommendations. The two reports produced

by the working groups will play a key role in the Category 3 source accountability reevaluation. Details of this reevaluation were provided by the NRC in a [staff requirements memo](#) of 18 October 2016, COMJMB-16-0001, "Proposed Staff Re-Evaluation of Category 3 Source Accountability."

This reevaluation is different from past efforts in its scope. Not only will the reevaluation build on the efforts resulting from the 2015 GAO investigation, but it will integrate the recently completed [comprehensive review of 10 CFR 37](#) and current threat landscape. The Commission clearly desires a broad assessment.

To conduct the reevaluation of Category 3 source security and accountability, an NRC-Agreement State working group was established. The working group will evaluate and make recommendations on whether it is necessary to revise NRC regulations or processes governing source protection and accountability to continue to ensure adequate protection of public health and safety. The working group's evaluations have begun, and their recommendations will be documented in a paper to be provided to the Commission in August 2017.

With the number of NRC and Agreement State licensees that could be affected by this effort exceeding 5,000, an important part of NRC's evaluation is soliciting input from the affected regulatory community, many of whom have never been subject to enhanced security and accountability requirements. We have published two *Federal Register* notices (FRN), [82 FR 2399](#) and [82 FR 4938](#), which contain specific questions for stakeholders to consider regarding Category 3 sources. The working group will hold public meetings and webinars and give presentations to industry and professional organizations to solicit feedback on the FRN. Further information on this effort and public meeting details can be found at the [NRC website](#). Your input on this reevaluation is important in order to fully assess the regulatory impact of any recommendations that might be made regarding security and accountability of Category 3 sources.

DOE News

DOE Report on National Labs

The Department of Energy's (DOE) scientific and technical capabilities are rooted in its system of national laboratories—17 world-class institutions that constitute the most comprehensive research and development network of its kind. The first [Annual Report on the State of the DOE National Laboratories](#) describes the DOE national laboratory system, its role in advancing the frontiers of science and technology, and efforts to ensure it continues as a national resource for the DOE's near- and long-term missions. The DOE committed to prepare this report in response to recommendations from the congressionally mandated Commission to Review the Effectiveness of the National Energy Laboratories (CRENEL) so that the DOE could better communicate the value that the laboratories provide to the nation.

The report organizes issues and recommendations into six themes: Recognizing Value, Rebuilding Trust, Maintaining Alignment and Quality, Maximizing Impact, Managing Effectiveness and Efficiency, and Ensuring Lasting Change.

Overall, the report concludes that the vitality of the DOE national laboratories has improved over the past decade, in part due to investments made through the American Recovery and Reinvestment Act and from a focus on enhancing the relationship between the laboratories and the DOE. Nonetheless, hurdles remain in recruiting and retaining the best and brightest researchers and staff, updating aging infrastructure for 21st century needs, continuing to improve operational efficiencies, and further strengthening the laboratories' partnerships with DOE.

This article is adapted from the [DOE website](#).



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