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**To:** "NRCREP@nrc.gov" <NRCREP@nrc.gov>  
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Attached are comments from the Texas Department of State Health Services, radiation control program staff.

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**NRC SEEKS PUBLIC COMMENT ON RADIATION SOURCE PROTECTION AND SECURITY**

The Nuclear Regulatory Commission is requesting public comment on several issues concerning the protection and security of radiation sources, as part of its requirements under the Energy Policy Act of 2005.

The legislation established the Radiation Source Protection and Security Task Force, with the NRC as its chair, to evaluate and provide recommendations relating to the security of radiation sources in the United States from potential criminal or terrorist threats, including acts of sabotage, theft or use of a radiation source in a radiological dispersal device ("dirty bomb"). The task force is comprised of representatives from NRC; the departments of Homeland Security, Defense, Energy, Transportation, Justice, State and Health and Human Services; the Director of National Intelligence; the Central Intelligence Agency; the Federal Bureau of Investigation; the Environmental Protection Agency; the Federal Emergency Management Agency; and the Office of Science and Technology Policy.

Details on the task force and the request for comment are available in a Federal Register notice published Jan. 11. The task force's efforts are concerned primarily with Category 1 and Category 2 sources as defined by the International Atomic Energy Agency's Code of Conduct on the Safety and Security of Radioactive Sources. (These are considered sources of greatest concern from a security standpoint; examples include but are not limited to sources used in irradiators, radiography and certain radiation cancer treatments.) Spent nuclear fuel and special nuclear materials (plutonium and uranium isotopes) are excluded.

The topics on which the NRC is seeking comment include: (1) the list of sources requiring security because of their public health risk or

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potential attractiveness to terrorists; (2) the national system for recovery of lost or stolen radiation sources; (3) safe and secure storage of radiation sources when not in use; (4) the national source tracking system for radiation sources; (5) a national system for proper disposal of radiation sources; (6) import and export controls; (7) procedures for improving security and control for use and storage of radiation sources; (8) procedures for improving the security of transportation of sources; (9) background checks for individuals with access to sources; and (10) alternative technologies that could perform all or some of the functions that use radiation sources.

Comments may be submitted through Feb. 10 to Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mail Stop T6-D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001; by e-mail to [NRCREP@nrc.gov](mailto:NRCREP@nrc.gov); or by fax to (301) 415-5144. Please mark all comments "RSPS-TF" in the subject line.

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*Topic 2: A national system for recovery of lost or stolen radiation sources*

We commend the Nuclear Regulatory Commission (NRC), Department of Energy (DOE), and Conference of Radiation Control Program Directors for their cooperative roles in supporting the establishment of the Off-Site Source Recovery Project (OSRP). The authorized programs and appropriate sufficient funds should continue to be funded by Congress on an ongoing basis to maintain a robust national capability for the recovery and disposition of vulnerable and orphan sources within the United States and abroad in order to assure the national defense and security and protection of public health and safety. Continued funding to support the expanded mission will be critical to continued OSRP success.

We recommend that the Administration establish and implement a national policy aimed at recovering vulnerable and orphan sources of US origin that currently reside outside of US borders instead of the current efforts that involve approval of the recovery of individual sources on a case-by-case basis. Although the OSRP is recovering sources, there is no statement by the Administration that it is the policy of the United States to recover vulnerable and orphan sources of US origin. Such a policy statement would institutionalize the program and form the basis for its existence into future Administrations.

*Topic 5: A national system to provide for the proper disposal of radiation sources*

We recommend that a requirement be incorporated into the licensing process that an acquirer of Category 1, 2, or 3 sources must provide financial surety for disposal of the sources. This financial surety could be, for example, via an escrow account under NRC or Agreement State control with sufficient funds to cover government or third-party costs to dispose of the licensed sources with return of remaining funds to the purchaser upon disposition of all sources and termination of the license. The establishment of financial surety is consistent with the IAEA *Code of Conduct*. The absence of a requirement that users of radioactive sources prepay or otherwise provide financial surety for disposal costs can result in licensees being uninformed of the disposal costs and being unprepared to pay them when their sources reach the end of their service lives. Options such as return to the manufacturer are not necessarily cost-free and may not be available if the manufacturer discontinues business, as has already happened with some major manufacturers. Establishing such financial surety requirements would serve to more completely move toward implementation of the *Code of Conduct*.

An escrow account is one financial surety method acceptable for meeting the requirements of 10CFR30.35(f). The current decommissioning fund established in 10CFR30.35(a) is generally applicable to large companies or institutions by virtue of the thresholds established in the rule. The recommendation to include all Category 1, 2, or 3 sealed sources would expand the need for financial surety to small companies that may not have the financial resources inherent in those that would possess sources of the size currently covered by 10CFR30.35. Therefore, the financial surety vehicle needs to be one that ensures funds adequate to cover source disposal are set aside in a manner that

they cannot be withdrawn by the licensee before all sources in their possession are properly disposed, except for the purpose of covering the cost of source disposal.

The recommendation that Category 1, 2, and 3 sources be required to have financial surety is based on the fact that all three categories are classified as “dangerous” under the IAEA Categorization system. Therefore, proper disposal of each of these categories of sources is needed to protect public health and safety. The threshold for financial surety of sealed sources in 10CFR30.35 is millions of times greater than some of the commonly licensed sealed sources that are classified as “dangerous” by IAEA standards.

The Federal Register notice cites in the discussion of *Topic 2* that the NRC’s lost source enforcement policy (December 18, 2000; 65 FR 70139) serves as a discouragement from improperly disposing of a source. However, this is only effective for licensees that are still in business and citable for the penalty. The addition of a requirement for financial surety as a preventative measure would assure that users of radioactive sources provide the financial support for their proper disposal rather than federal and state governmental agencies.

An alternative to the requirement for financial assurance for disposition of these sources would be a surcharge on annual fees charged to radioactive material licensees that could be placed into a special account for use by the agency for disposal of orphan sources and cleanup of accidental contamination caused by a licensee that has gone out of business or that is bankrupt. This methodology has been used in several Agreement States with some success.

*Topic 6: Import and export controls on radiation sources to ensure that recipients of radiation sources are able and willing to adequately control radiation sources*

We are in agreement that the rule for import/export controls is generally consistent with the IAEA *Code of Conduct* and the supporting guidance and that the rule will have a very significant and positive impact on the control of international transfers of radioactive sources. We believe the Department of State must continue to use all means possible to work with IAEA to get its member states to adopt and implement the import/export controls and to prevent source transactions with countries that do not have proper source controls.

*Topic 8: Procedures for improving the security of transportation of radiation sources*

We recommend that special form testing records be maintained permanently and made available online by manufacturers registering their special form testing records with the Department of Transportation (DOT) in a manner that will not identify potential vulnerabilities of the packaging.

One barrier to vulnerable source recovery is a transportation issue related to the characterization and documentation of sealed sources as special form radioactive

material. The requirements for characterization are delineated in 49 CFR Part 173.469. The issue has been that manufacturers of sealed sources typically tested their sources and maintained records of that testing which was documented via a source certificate. Unless the manufacturer applied to the Department of Transportation (DOT) for a Certificate of Competent Authority (COCA), there was no record held by the regulator of the special form testing. If the manufacturer then went out of business the records of special form testing were subsequently lost. The failure to maintain a national record of sealed source special form testing frequently means that the material is reclassified as normal form radioactive material for transportation purposes resulting in the fact that the maximum quantity that can be shipped in a Type A package is reduced by a factor of 1,000. This typically means that sources originally shipped during distribution in a Type A package must now be recovered by shipment in a Type B package. Shipments in Type B packages usually require an NRC approved Quality Assurance (QA) program, which is not very common among NRC licensees. To maintain the ability of the licensee to ship the material in a Type A package, all special form testing records would need to be registered with the DOT regardless of whether or not the manufacturer has applied for a COCA.