

# Category 3 Source Security and Accountability Webinar

**Webinar information:**

**<https://attendee.gotowebinar.com/register/1421619436483387906>**

**Phone number: 1-888-790-4851**

**Access Code: 3702121**

---

# Agenda

- Public comment process
- Background
- Comment areas
- Future public meeting/webinar dates
- Meeting closure

---

# Public Comments

- This is an NRC Category 3 Public Meeting.
- Responses to questions in the *Federal Register* notice (82 FR 2399) made during this public meeting/webinar and those submitted to the NRC will be considered by NRC in preparing a report to the Commission as directed by the Staff Requirements Memorandum (SRM) for COMJMB-16-0001.
- Please do not provide non-public, official-use-only, Safeguards, and/or classified information related to a specific facility.

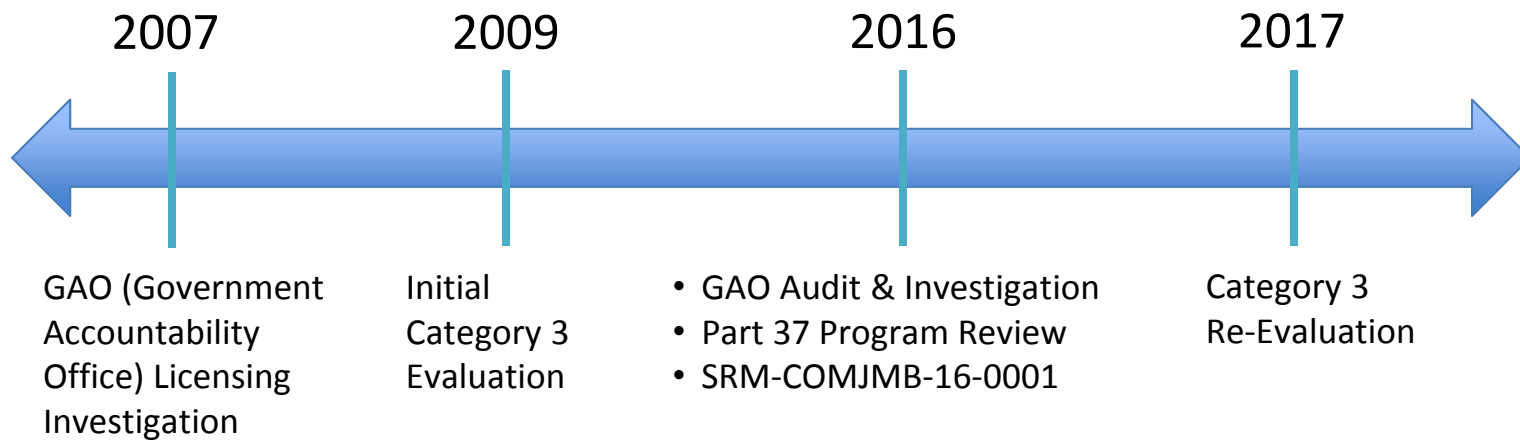
---

# Process For Submitting Public Comments

- Submit all comments by March 10, 2017
  - Federal Rulemaking website:  
<http://www.regulations.gov>, Docket ID NRC-2016-0276
  - Mail comments to:  
Cindy Bladey, Office of Administration  
Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
NOTE: Please include the Docket ID NRC-2016-0276 in the subject line of your submission.

---

# Background



Resources:

NRC Response to 2016 GAO Audit & Investigation Website

<https://www.nrc.gov/materials/miau/response-2016-gao-audit-investigation.html>

Category 3 Re-Evaluation Website

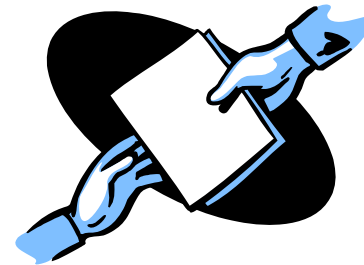
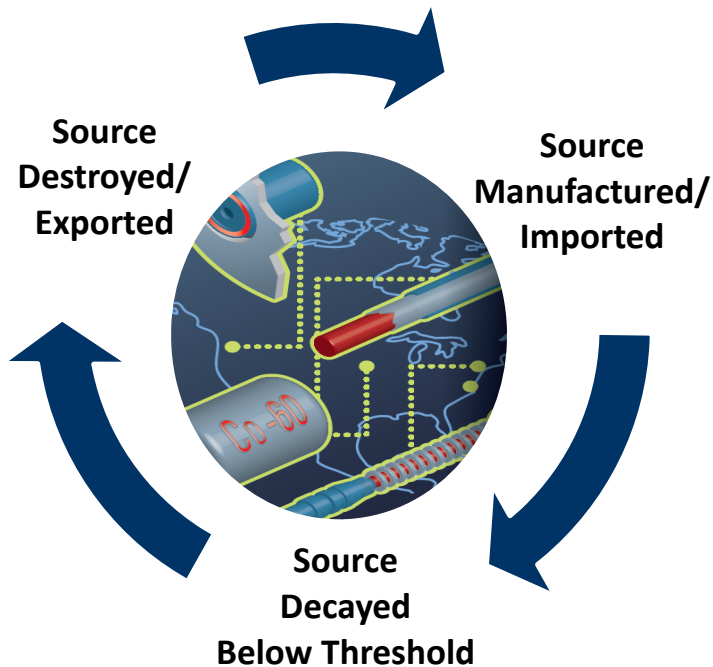
<https://www.nrc.gov/security/byproduct/category-3-source-security-accountability-reevaluation.html>

---

# SRM-COMJMB-16-0001

1. Evaluation of pros and cons of different methods for verification of license's validity
2. Evaluation of the pros and cons of including Category 3 sources in the National Source Tracking System (NSTS)
3. Assessment of any additional options for addressing GAO recommendations on source accountability
4. Vulnerability assessment
5. Regulatory impact analysis of benefits and costs of any recommended changes
6. Discussion on potential actions that do not require regulatory changes
7. Assessment of the risk of aggregation of Category 3 sources into Category 2 quantities
8. Collaboration with all affected stakeholders
9. Any other factors to help inform decision

# National Source Tracking System



Transaction Reporting  
Transfer, Receipt, Import,  
Export



Annual Inventory  
Reconciliation

The relevant regulations that discuss the NSTS are found in 10 CFR § 20.2207 and state that each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source must complete and submit a National Source Tracking Transaction Report by close of the next business day.

---

# Web-Based Licensing System



- Provides an up-to-date repository of all risk-significant licenses nationwide
- Provides an up-to-date repository of all licenses for NRC and three Agreement States
- Working with several states on using WBL
- Agreement States are voluntarily providing risk-significant licenses to the NRC for inclusion in WBL



# License Verification System

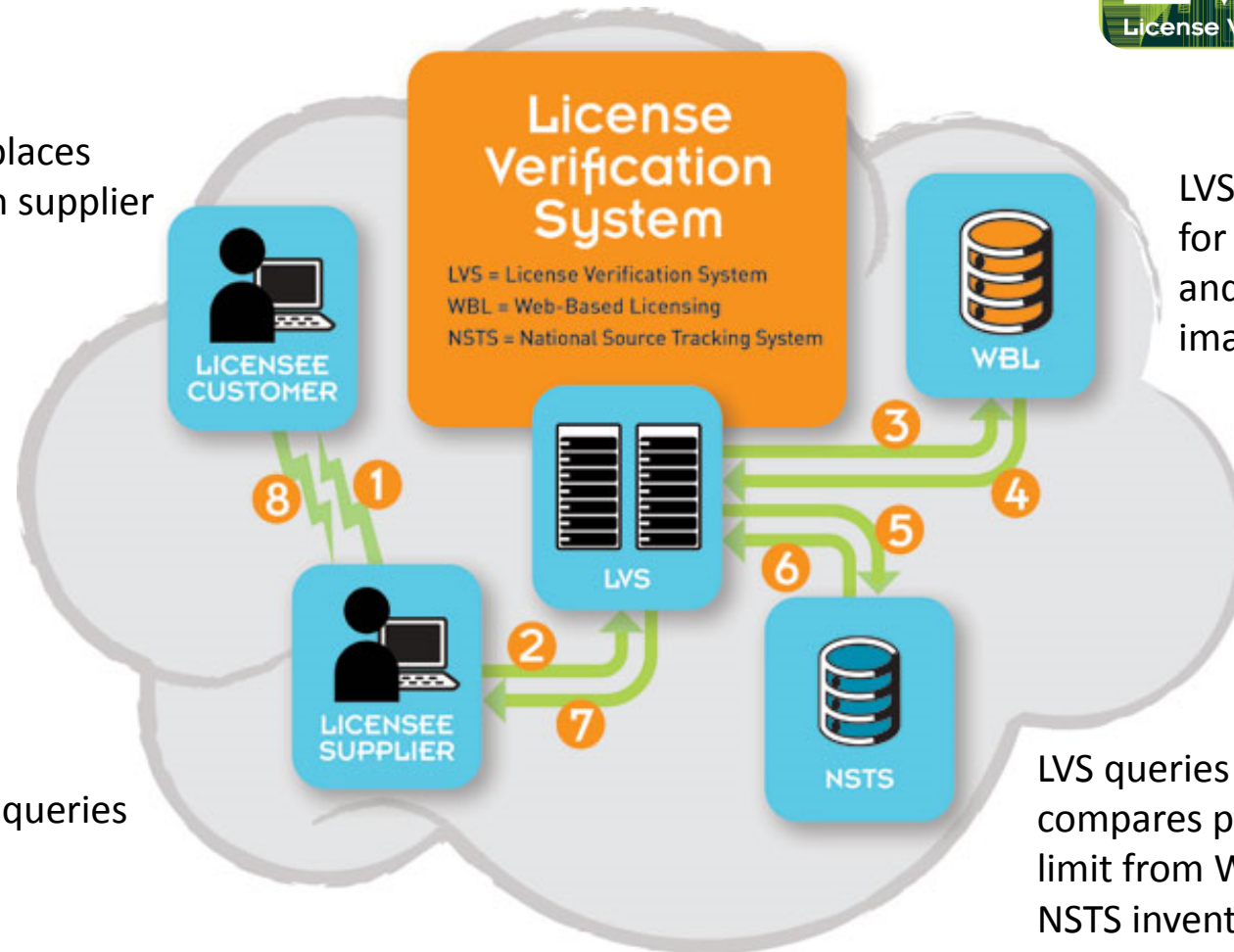


Licensee places order with supplier

LVS queries WBL for possession limit and copy of license image

Supplier queries LVS

LVS queries NSTS and compares possession limit from WBL to NSTS inventory



---

# System Access

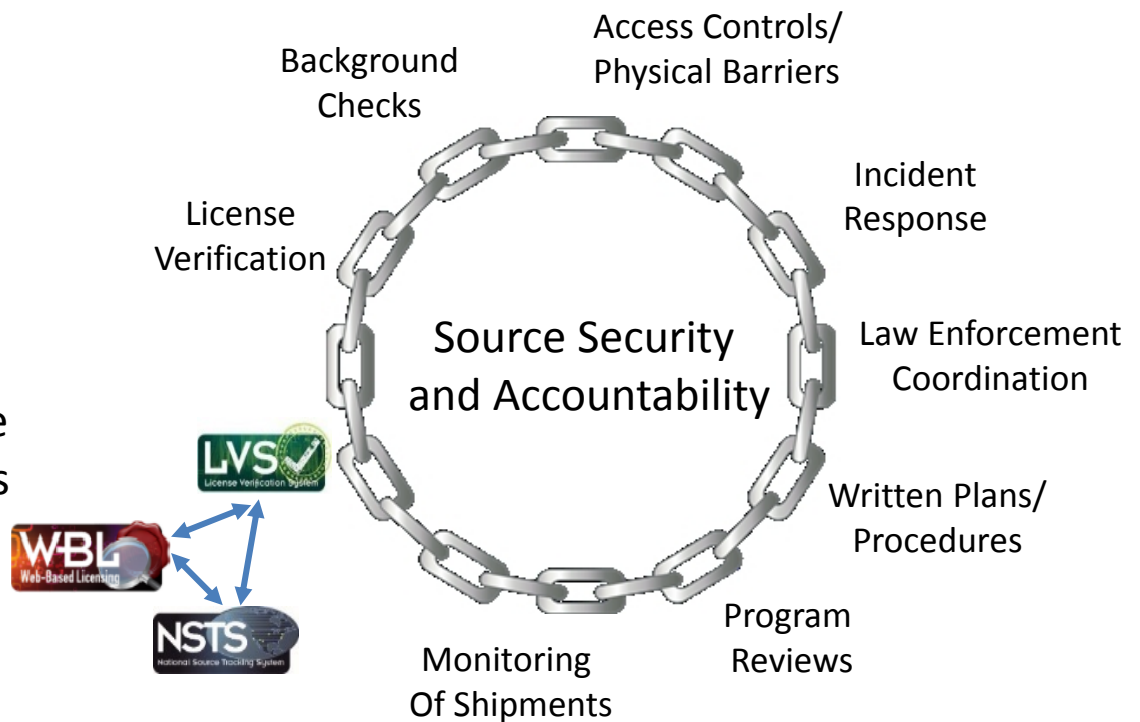
- Credentialing process
  - Employment verification
  - Need to know determination
  - Identity proofing

- One Time Passwords



# Enhancements under Consideration

- Verification of Category 3 licenses through the License Verification System (LVS) or the regulatory authority as is done with Category 1 and 2 licenses
- Inclusion of Category 3 sources in the NSTS as is done with Category 1 and 2 sources
- Expanding physical security requirements to include Category 3 quantities of radioactive material along with Category 1 and 2 quantities of radioactive material



---

# Comment Areas

- General questions related to license verification
- General questions related to the NSTS
- Specific questions for licensees related to license verification
- Specific questions for licensees related to the NSTS
- Specific questions for Agreement States related to license verification
- Specific question for Agreement States related to the NSTS
- Other questions

# Category 1, 2, and 3 Thresholds

Radioactive material	Category 1 (TBq)	Category 1 (Ci)	Category 2 (TBq)	Category 2 (Ci)	Category 3 (TBq)	Category 3 (Ci)
Actinium-227	20	540	0.2	5.4	0.02	0.54
Americium-241	60	1,620	0.6	16.2	0.06	1.62
Americium-241/Be	60	1,620	0.6	16.2	0.06	1.62
Californium-252	20	540	0.2	5.4	0.02	0.54
Cobalt-60	30	810	0.3	8.1	0.03	0.81
Curium-244	50	1,350	0.5	13.5	0.05	1.35
Cesium-137	100	2,700	1	27	0.1	2.7
Gadolinium-153	1,000	27,000	10	270	1	27
Iridium-192	80	2,160	0.8	21.6	0.08	2.16
Plutonium-238	60	1,620	0.6	16.2	0.06	1.62
Plutonium-239/Be	60	1,620	0.6	16.2	0.06	1.62
Polonium-210	60	1,620	0.6	16.2	0.06	1.62
Promethium-147	40,000	1,080,000	400	10,800	40	1080
Radium-226	40	1,080	0.4	10.8	0.04	1.08
Selenium-75	200	5,400	2	54	0.2	5.4
Strontium-90	1,000	27,000	10	270	1	27
Thorium-228	20	540	0.2	5.4	0.02	0.54
Thorium-229	20	540	0.2	5.4	0.02	0.54
Thulium-170	20,000	540,000	200	5,400	20	540
Ytterbium-169	300	8,100	3	81	0.3	8.1

---

# General Questions

## Related to License Verification

1. Should the current methods for verification of licenses prior to transferring Category 3 quantities of radioactive material listed in 10 CFR 30.41(d)(1)-(5), 10 CFR 40.51(d)(1)-(5), and 10 CFR 70.42(d)(1)-(5) be changed such that only the methods prescribed in 10 CFR 37.71 are allowed?

Parts 30/40/70 Methods of License Verification

1. Transferor has current copy of transferee's specific license/registration certificate
2. Transferor has written certification by transferee that he is authorized by license/registration certificate
3. Transferor may accept oral certification by transferee for emergency shipments
4. Transferor may obtain other information compiled by a reporting service from official records
5. Transferor may obtain record confirmation from NRC or Agreement State

---

# General Questions

## Related to License Verification

### (continued)

2. Would there be an increase in safety and/or security if the regulations were changed to only allow license verification through the LVS or the transferee's license issuing authority for transfers of Category 3 quantities of radioactive material? If so, how much of an increase would there be?
3. If the NRC changed the regulations to limit license verification only through the LVS or the transferee's license issuing authority for transfers of Category 3 quantities of radioactive material, should licensees transferring Category 3 quantities to manufacturers and distributors be excepted from the limitation?

---

# General Questions Related to License Verification (continued)

4. Is there anything else we should consider when evaluating different methods of license verification prior to transferring Category 3 quantities of radioactive material?



---

# General Questions Related to the NSTS

1. Should Category 3 sources be included in the NSTS? Please provide a rationale for your answer.
2. If Category 3 sources are included in the NSTS, should the NRC consider imposing the same reporting requirements currently required for Category 1 and 2 sources (10 CFR 20.2207(f))?

NSTS Reporting Requirements in 10 CFR 20.2207(f)

- Each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source must submit a National Source Tracking Transaction Report by close of the next business day after the transaction.
- Reporting methods include (1) direct to NSTS; (2) electronically using a computer-readable format; (3) fax; (4) mail; or (5) telephone with follow-up by fax or mail.

---

# General Questions

## Related to the NSTS (continued)

3. Should the NRC consider alternatives to the current NSTS reporting requirements for Category 1 and 2 sources to increase the immediacy of information availability, such as requiring the source transfers to be reported prior to, or on the same day as, the source shipment date?
4. Would there be an increase in safety and/or security if the regulations were changed to include Category 3 sources in the NSTS? If so, how much of an increase would there be?
5. Is there anything else we should consider as part of our evaluation of including Category 3 sources in the NSTS?

---

# Specific Questions for Licensees Related to License Verification

1. It currently takes approximately one month to get credentialed to access the LVS. If you currently do not have online access to LVS, and NRC establishes new requirements for license verification involving Category 3 quantities of radioactive material, would you be inclined to sign up for online access, or would you use alternative methods for license verification such as e-mailing the NRC Form 749 “Manual License Verification Report” to the LVS Help Desk or calling the license-issuing regulatory authority directly?

---

# Specific Questions for Licensees Related to License Verification (continued)

2. Approximately how many transfers involving Category 3 quantities of radioactive material do you do monthly? What percentage involves transfers directly to/from a manufacturer?
3. Should license verification be required when transferring to an established manufacturer?
4. Do you have online access to LVS? If so, have you experienced any issues with the LVS? Do you have any recommendations on how to improve LVS?

---

# Specific Questions for Licensees Related to the NSTS

1. It currently takes approximately one month to get credentialed to access the NSTS. If you currently do not have online access to the NSTS and NRC establishes new requirements for the tracking of Category 3 sources in the NSTS, would you be inclined to sign up for online access or would you use alternative methods for NSTS reporting such as e-mailing or faxing the NRC Form 748 “National Source Tracking Transaction Report” to the NSTS Help Desk?
2. Do you have online access to the NSTS? If so, have you experienced any issues with the NSTS? Do you have any recommendations on how to improve the NSTS?

---

# Specific Questions for Agreement States Related to License Verification

1. Approximately how many licenses do you authorize for Category 1, 2, and 3 quantities of radioactive material?
2. If license verification through the LVS or the transferee's license issuing authority is required for transfers involving Category 3 quantities of radioactive material, would you encourage the use of LVS among your licensees, or plan for the additional burden imposed by the manual license verification process?

---

# Specific Questions for Agreement States Related to License Verification (continued)

3. If license verification through the LVS or the transferee's license issuing authority is required for transfers involving Category 3 quantities of radioactive material, would you consider adopting the Web-Based Licensing System (WBL) to ensure that the most up-to-date licenses are available for license verification using the LVS or voluntarily provide your Category 3 licenses (similar to what some Agreement States do now for Category 1 and 2 licenses) to be included in WBL, or would you do neither and prefer licensees to use the manual license verification process?

---

# Specific Questions for Agreement States Related to License Verification (continued)

4. What would the impact in time and resources be on your program to handle the additional regulatory oversight needed for Category 3 licensees if license verification through the LVS or the transferee's license issuing authority was required for transfers involving Category 3 quantities of radioactive material?



---

# Specific Question for Agreement States Related to the NSTS

1. The NRC currently administers the annual inventory reconciliation process on behalf of the Agreement States. This process involves providing hard copy inventories to every licensee that possesses nationally tracked sources at the end of the year, processing corrections to inventories, and processing confirmations of completion of the reconciliation into the NSTS. The process involves a significant amount of staff time and resources from November to February. If the Agreement States were to adopt administration of the annual inventory reconciliation process and if Category 3 sources were included in the NSTS, what would the additional regulatory burden be on the Agreement States to perform the annual inventory reconciliation for Category 1, 2, and 3 sources?

---

# Other Questions

1. Should physical security requirements for Category 1 and 2 quantities of radioactive material be expanded to include Category 3 quantities?
2. Some Category 3 sources are covered under a general license (10 CFR 31.5). Should the NRC consider establishing maximum quantities in general licensed devices, thereby reserving authorization to possess Category 1, 2, and 3 quantities of radioactive material to specific licensees?

---

## Future Public Meeting/Webinar Dates

- February 23, 2017 – two public meetings/webinars in Boston, MA
- February 28, 2017 – two public meetings/webinars in Houston, TX
- March 2, 2017 – webinar

\* Meetings will be noticed on the public meeting website:

<https://www.nrc.gov/pmns/mtg>

---

# Meeting Closure

Category 3 Source Security and Accountability Re-Evaluation Website

<https://www.nrc.gov/security/byproduct/category-3-source-security-accountability-reevaluation.html>

## Points of contact

Duncan White

[Duncan.White@nrc.gov](mailto:Duncan.White@nrc.gov)

(301) 415-2958

Irene Wu

[Irene.Wu@nrc.gov](mailto:Irene.Wu@nrc.gov)

(301) 415-1951