



Security of Radioactive Material

Department of Health Services
Radiation Protection Section

March 7, 2014





Introduction & Overview

- 10 CFR 37 Briefing
- Focus is on new requirements
- WI DHS Rule Revision-in process



Acronyms

- WI DHS = Wisconsin Department of Health Services
- CFR= Code of Federal Regulations
- FR= Federal Register Notice
- LLEA= Local Law Enforcement Agency
- IC= Increased Controls
- NRC= Nuclear Regulatory Commission
- NUREG= Nuclear Regulatory Guidance
- T&R = Trustworthiness and Reliability
- RO= Reviewing Official
- RSO= Radiation Safety Officer



Part 37 License Condition

- License Condition available for:
 - Licensees with NRC licenses-March 2014 or after
 - WI licensees-March 2016
- No fee required



Agenda

- Significant changes from ICs
- Local law enforcement panel and discussion
- New security and access authorization programs
- Annual review requirements
- Resources: tool kit for licensees
- License verification system courtesy of the Nuclear Regulatory Commission



Workshop Goals

- Familiarize Increased Controls licensees with pending requirements
- Provide an interactive forum for licensees, local law enforcement and regulators
- Use technology to permit remote attendance



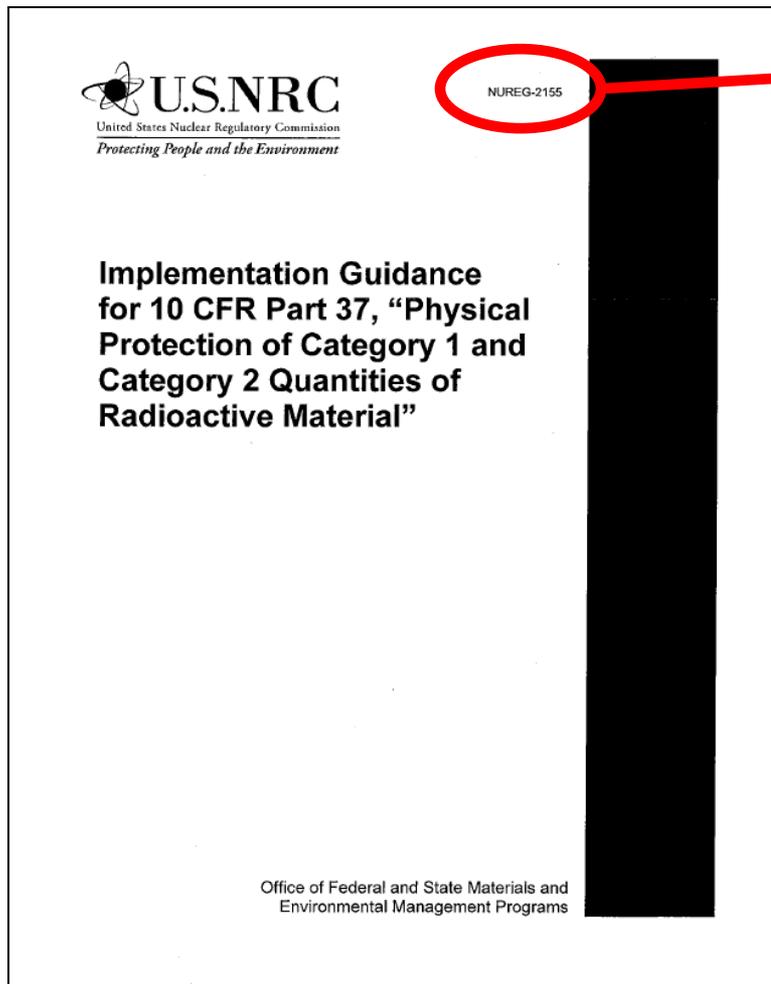
Federal Register

- 10 CFR 37 final rule was published on March 19, 2013 (78 FR 16922)
- NRC effective date March 19, 2014

<http://www.gpo.gov/fdsys/pkg/FR-2013-03-19/pdf/2013-05895.pdf>



Federal Guidance



NUREG-2155

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2155/>



Significant Changes

Reviewing
Official

Training

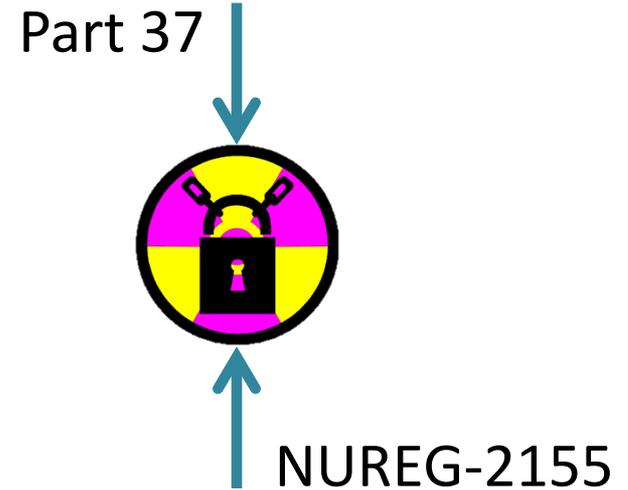
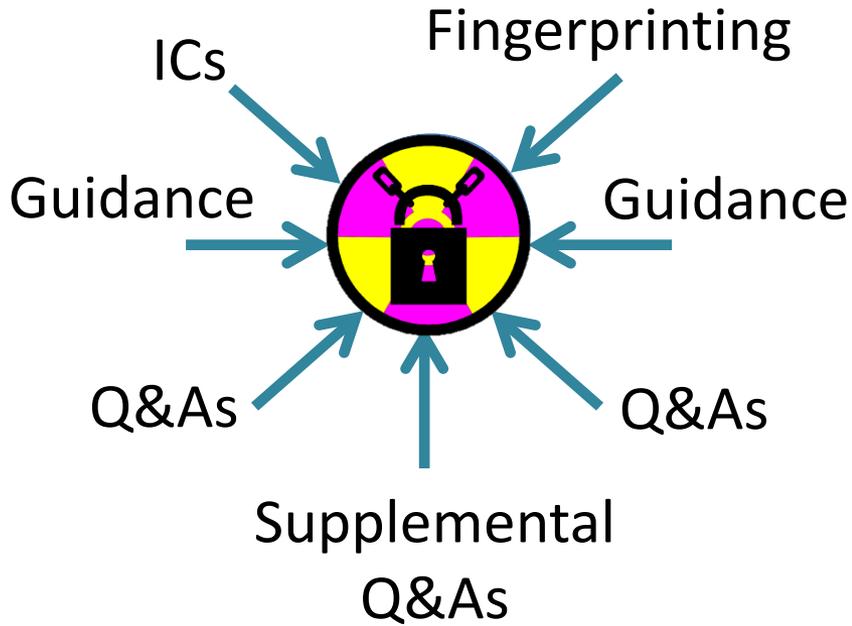
Procedures

Annual
Reviews

License
Verification
System



ICs vs. Part 37





Program Authority





Reviewing Official: 37.23(b)

- Replaces “T&R Official”
- Must be fingerprinted
- Licensees may name more than one reviewing official
- Notification to DHS not required



Security Training: 37.43(c)

- Before granting unescorted access
 - Security program and procedures
 - Purposes and functions of security measures
 - Reporting degraded conditions to licensee
 - Notifying LLEA of stolen material
 - Appropriate alarm response
- Refresher training every 12 months



New Procedures

- Implementing access authorization program
- Implementing security plan
- Information protection



Access Authorization

- Informed consent requirement
- Personal history disclosure
- Opportunity to challenge findings



Access Authorization - Background Investigations

- Must go back 7 years
- Verification of true identity [37.25(a)(2)]
- Re-investigations every 10 years



Protection of Information

- Must protect [37.43(d)]
 - Security plan
 - Implementing procedures
 - Unescorted access list
- Make T&R determinations on individuals with access to protected information
- Keep a list of who has access to protected information



License Verification: 37.71

- Required prior to **each** transfer of Category 1 or Category 2 material.
- Not required for transfers within the same organization



Questions ?



Local Law Enforcement Panel

- Representatives from Police Departments:
 - Waukesha
 - Brookfield
 - Milwaukee
- Representative from SE WI Threat Analysis Center



Local Law Enforcement Panel

- Annual Coordination with LLEA
 - What is the best way to contact?
 - When is a good time to do this?
 - What information does LLEA need concerning my facility?
 - What kind of information does LLEA need concerning evaluation of hazards?
 - Who can tell LLEA whether it is safe or not?

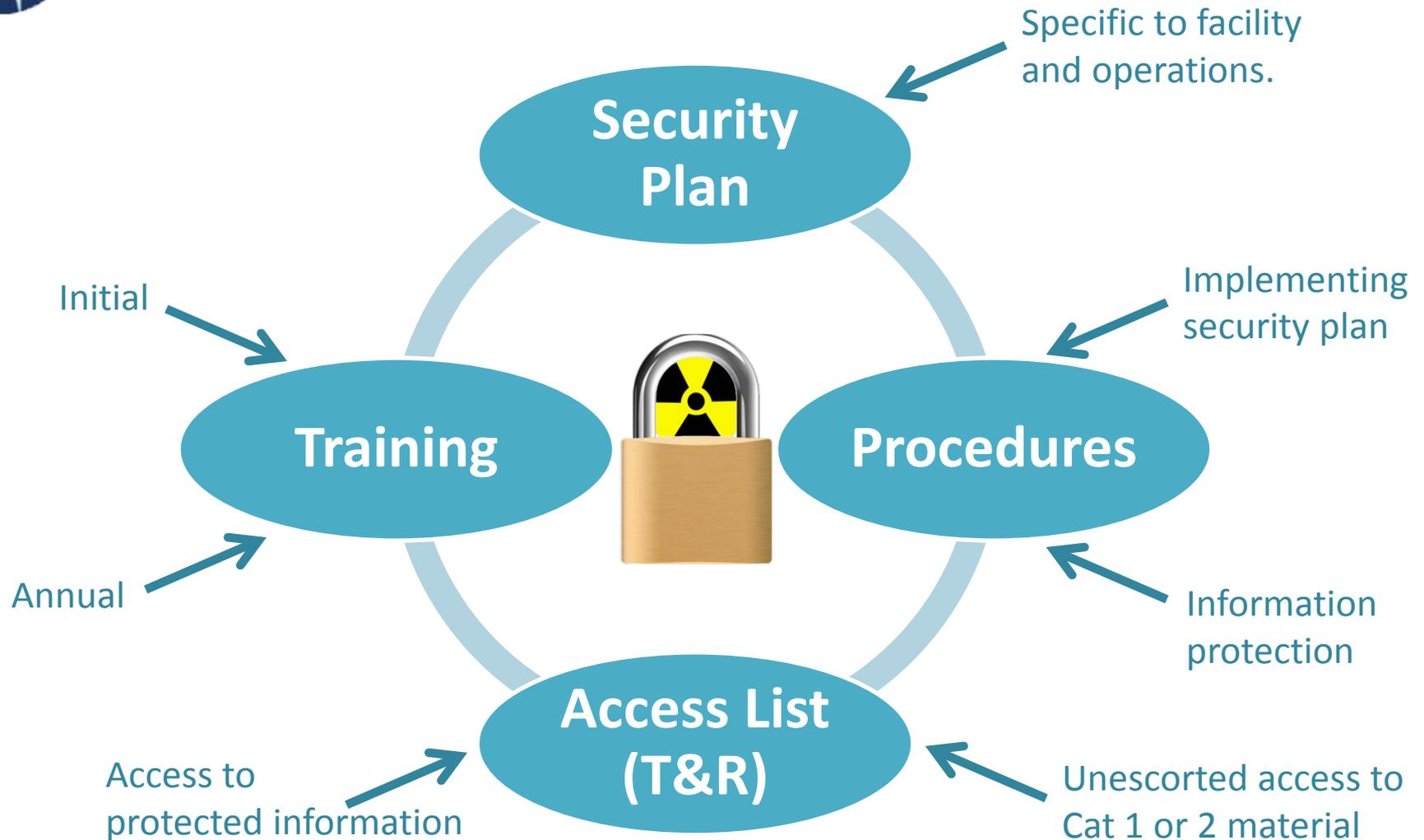


Security Workshop

B R E A K



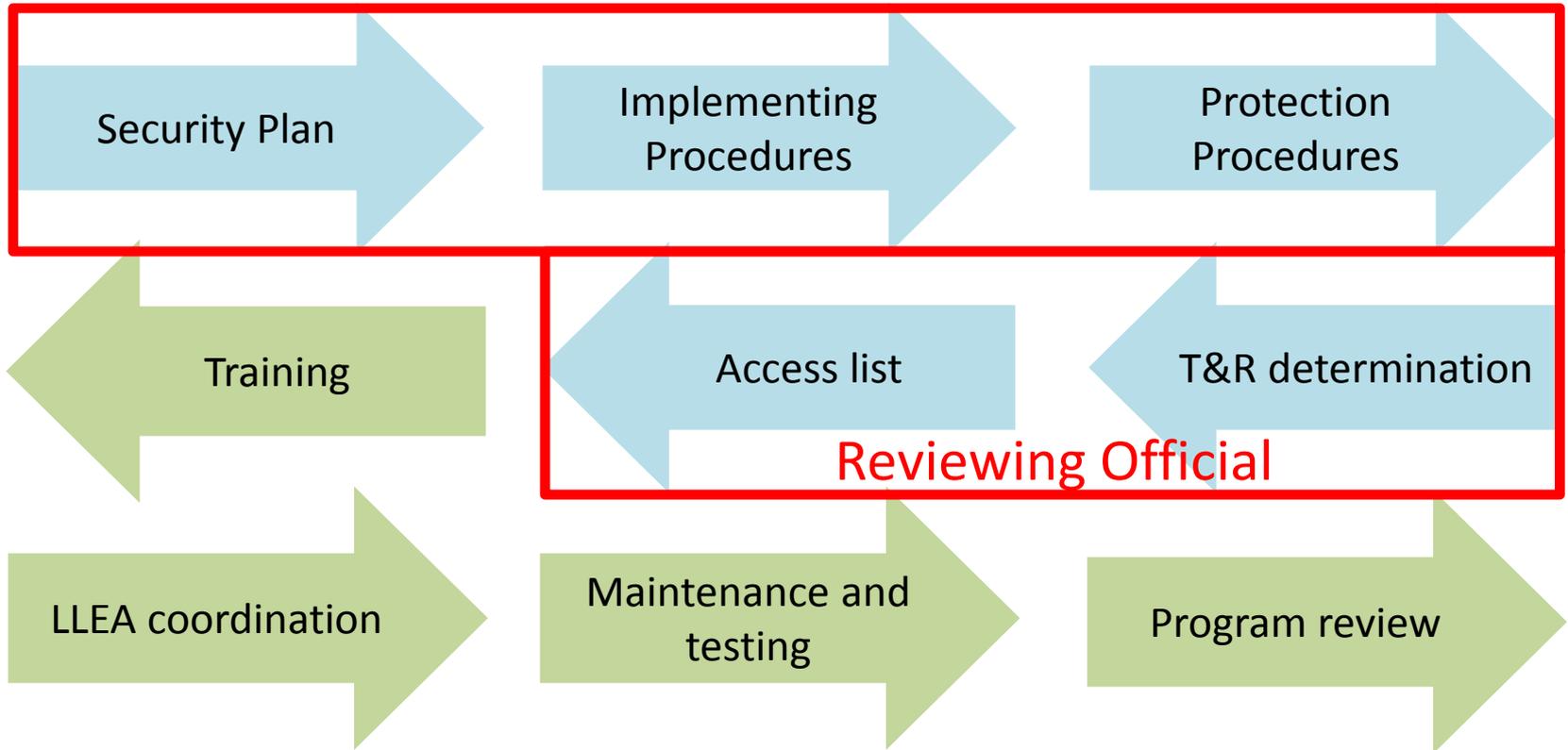
Security Program





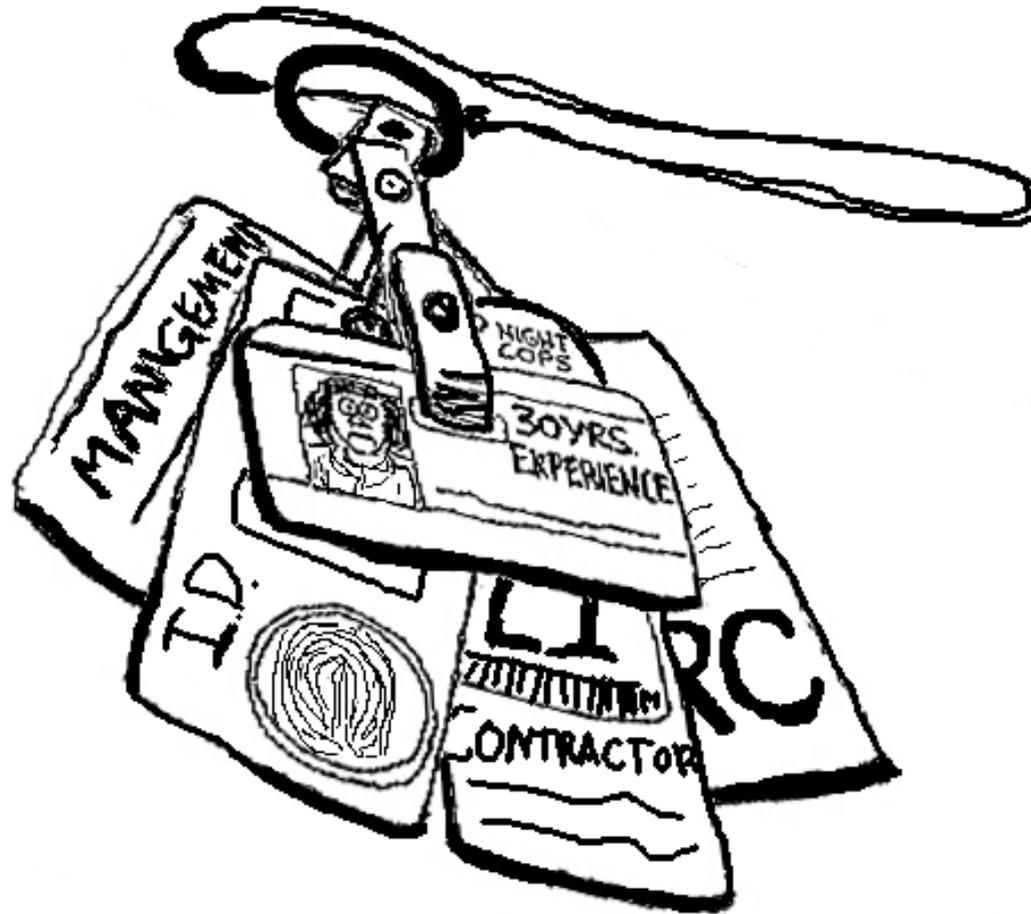
Security Program Documentation

“Individual responsible for the security program”



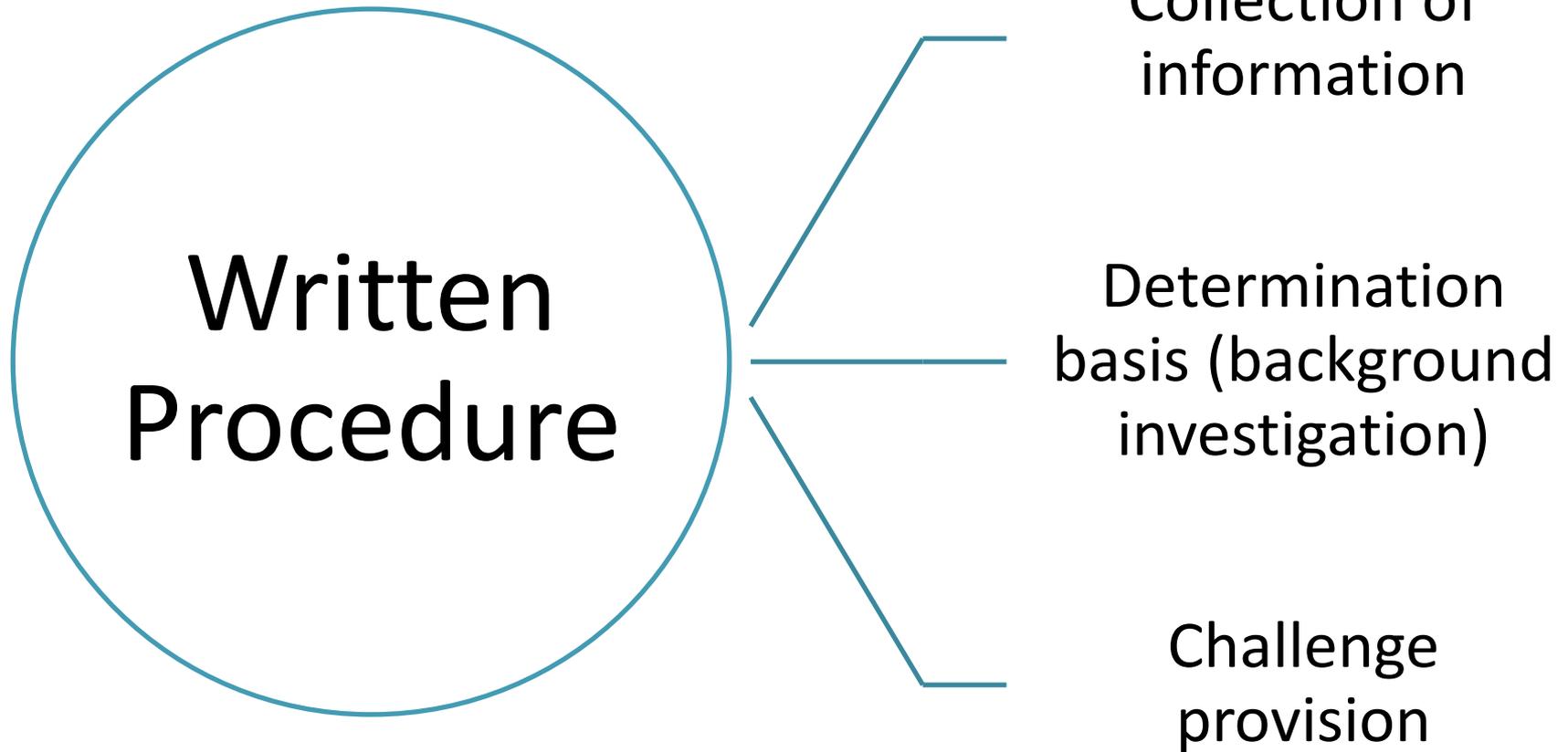


Access Authorization Program



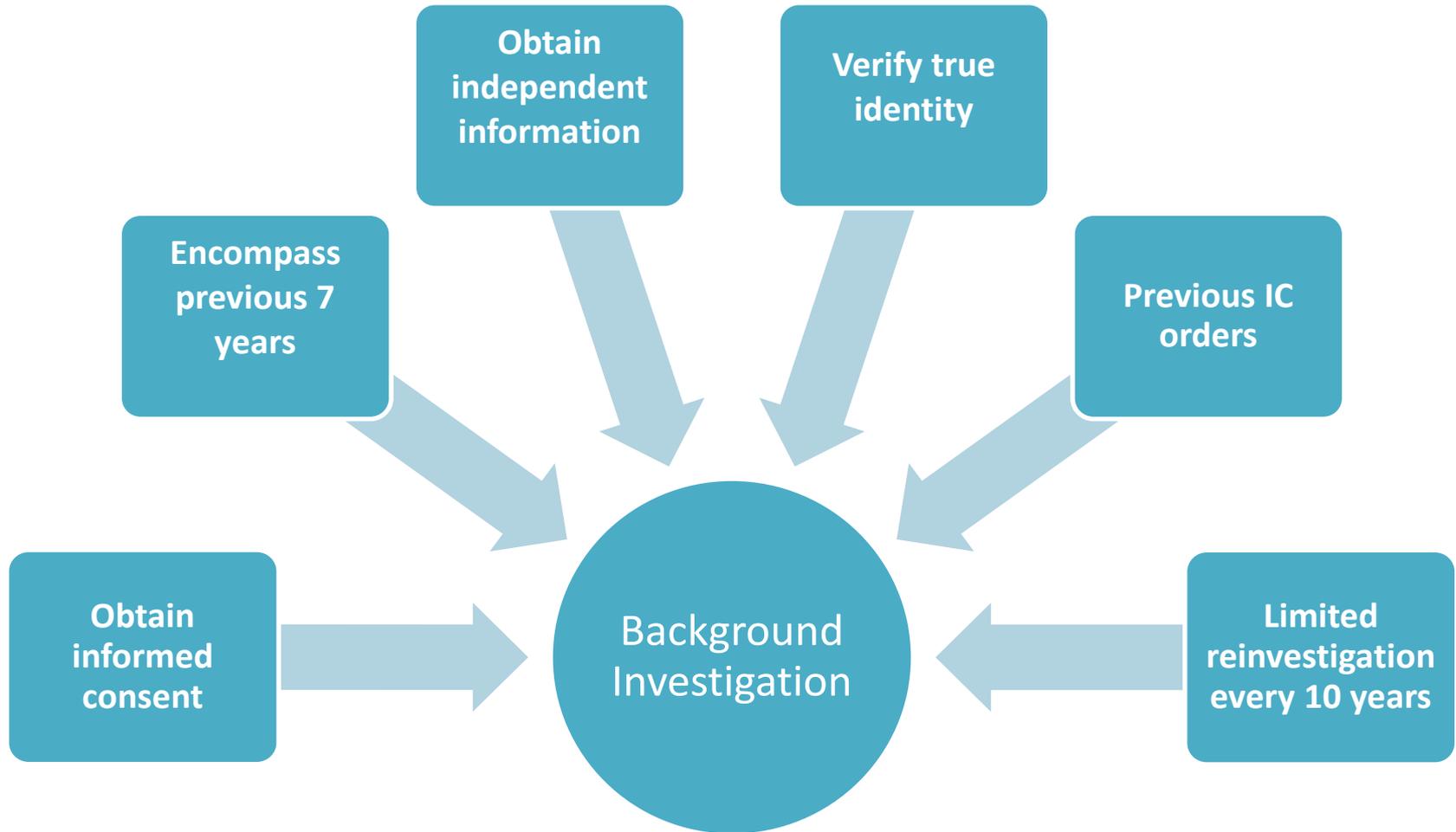


Access Authorization Procedures





Access Authorization Procedures





Access Authorization Procedures

- Before adverse determination is final
 - Provide a copy of information
 - May challenge any information, 10 days to initiate action to challenge FBI criminal history
- If access is no longer needed
 - Prompt measures to prevent access
 - 7 business days to remove from access list



Access Authorization Procedures

- Protecting personal information from unauthorized disclosure
 - System and procedure for record protection
 - Information may be provided to another licensee upon written request



Access Authorization Procedures

- Maintain documentation
 - Consent form
 - Receipt of challenge procedure
 - Adverse determinations
 - Basis of individual T&R determinations
 - Security Training
 - Unescorted Access List



Access Authorization Procedures

- Relief from Fingerprinting
 - 37.29(a) provides additional categories



Questions ?



Annual Program Review

- Access authorization program-37.33
- Security training-37.43(c)(3)
- Coordination with LLEA-37.45
- Security system maintenance and testing-37.51
- Security program content and implementation-37.55



Annual Program Review

- Considerations
 - An annual audit that reviews the program's content and implementation
 - Continuing effectiveness is not a static condition
 - Results must be documented and maintained for 3 years



Questions ?



Guidance

- NUREG 2155
- NRC Best Practices Document
- Wisconsin Guidance to be guided by licensee input
- Ask fellow licensees general questions



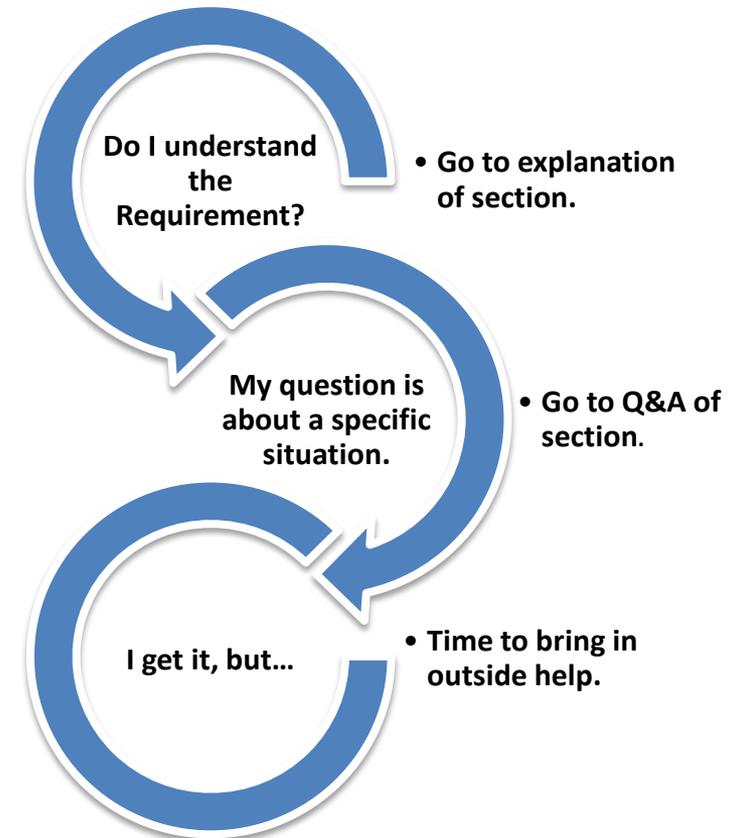
Guidance

- NUREG 2155 is...
 - Public information, available on the NRC website
 - Formatted by section of the regulation; short explanation followed by Q&A
 - Referenced to 10 CFR
 - For every type of licensee
 - Helpful if you are familiar with Part 37



Guidance

- How to use NUREG 2155
 - Examples of Q&A
 - 37.23(b) Q4
 - 37.43(d) Q6





Guidance

- NUREG 2155 Annex
 - Additional guidance for evaluation and individual's trustworthiness and reliability
 - Sample consent form for background investigations
 - Examples of reportable suspicious activities



Questions ?



System Overview

Angela Randall

Project Manager USNRC



Components of the Integrated Source Management Portfolio (ISMP)



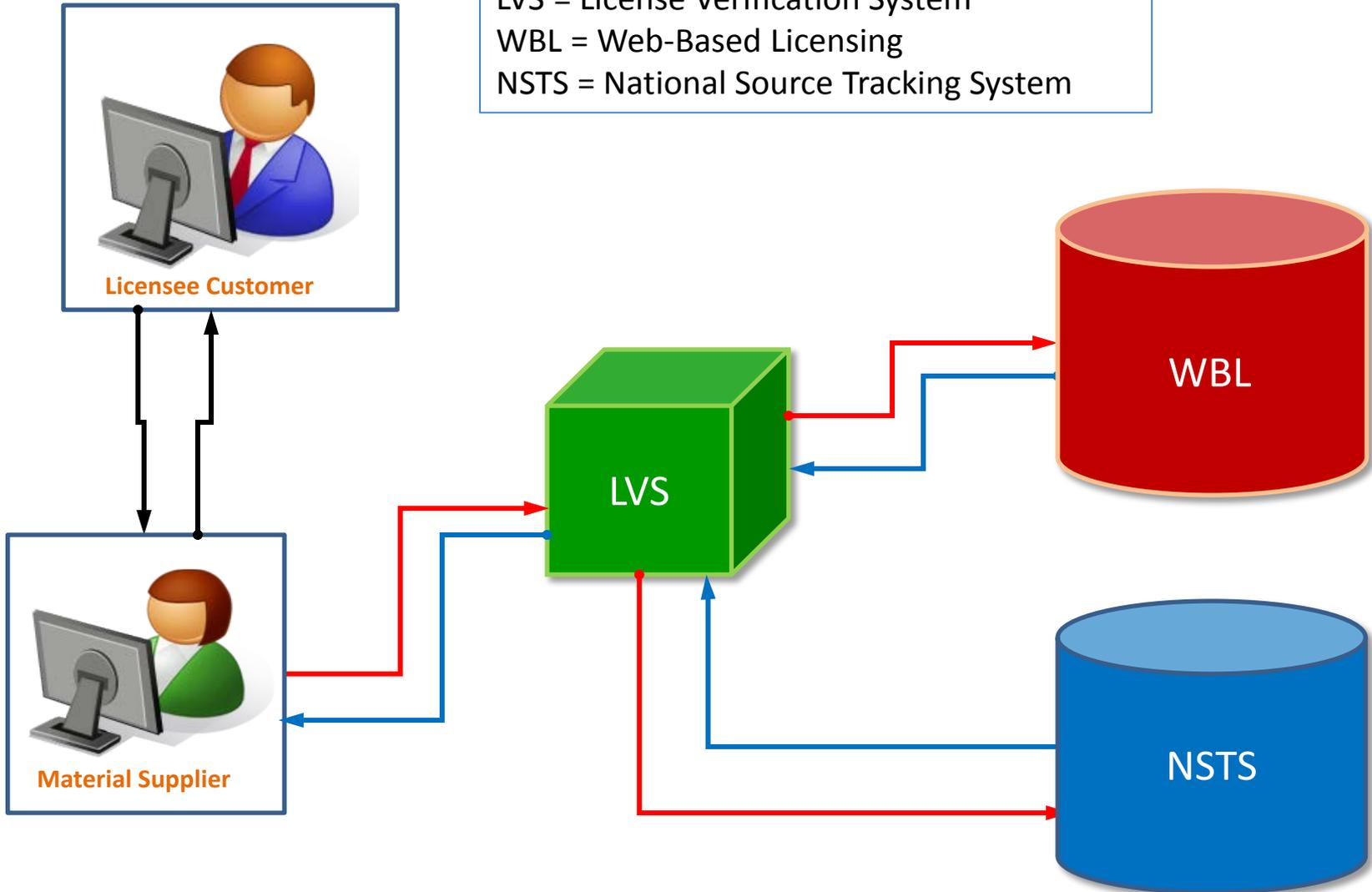


- Objectives
 - Enable the validation and accuracy of Category 1 and Category 2 materials licenses
 - Prevent unauthorized parties from purchasing radioactive materials
 - Enable verification that Category 1 and Category 2 possession limits are not exceeded
 - Enable verification that quantities and types of radioactive materials of all Categories are authorized before transferring the materials – supports compliance with Part 30 and Part 37 requirements
 - Provide convenient, robust, and secure access to the system via the web



License Verification Process

LVS = License Verification System
WBL = Web-Based Licensing
NSTS = National Source Tracking System





Part 37 License Verification Requirements

§ 37.71 Additional requirements for transfer of category 1 and category 2 quantities of radioactive material.

Any licensee transferring Category 1 or 2 quantities of radioactive material, prior to conducting the transfer shall verify with the NRC's license verification system or the license issuing authority that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred and that the licensee is authorized to receive radioactive material at the location requested for delivery.

If the verification is conducted by contacting the license issuing authority, the transferor shall document the verification. For transfers within the same organization, the licensee does not need to verify the transfer.



Part 37 License Verification Requirements

Two Methods of License Verification:

- Using the Online License Verification System (LVS)
- Manually using the Manual License Verification Process – Form 749 via LVS Help Desk



RSA SecurID SD600



RSA SecurID SD200



RSA SecurID SD520



RSA SecurID SID700



RSA SecurID SID800



BlackBerry with
RSA SecurID software token

The One Time Passwords can come in different hardware forms:

- Token
- Card
- Mobile Phone



LVS Webpage www.nrc.gov

License Verification System (LVS)

As a key component of the [Integrated Source Management Portfolio \(ISMP\)](#), the License Verification System (LVS) is envisioned as a “national verification system” that will ensure that only authorized licensees obtain radioactive materials in authorized amounts. Scheduled to be deployed in May 2013, LVS will be an integrated service designed to provide access to license information maintained by the U.S. Nuclear Regulatory Commission (NRC) and [Agreement States](#). Specifically, this system will broker information stored in the [Web-Based Licensing \(WBL\) System](#) and [National Source Tracking System \(NSTS\)](#). In so doing, LVS will enable authorized government authorities and authorized licensees to verify certain information about licensees authorized to possess, use, or ship radioactive materials. In that way, the system will help authorities to confirm that (1) a license is valid and accurate, (2) a licensee is authorized to acquire quantities and types of radioactive materials, and (3) the licensee’s Category 1 or 2 inventories do not exceed the possession limits. For additional details, see the following pages:

- [Concept of Operations](#)
- [Conceptual Overview of the License Verification Process](#)
- [License Verification System User Guide](#) 
- [Manual License Verification Procedure](#)
- [Manual License Verification Form](#) 



Request a user account by contacting the help desk:
LVSHelp.Resource@nrc.gov



By clicking the Login button, you are agreeing to follow the ISMP Rules of Behavior: [ISMP RULES OF BEHAVIOR](#)

LVS LOGIN



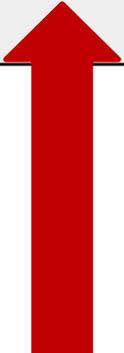
Insert Smart Card and Click

Login



One Time Password Login

Login





LVS Main Menu

The screenshot shows the LVS Main Menu interface. At the top, there is a header banner with the U.S. NRC logo on the left and the LVS logo on the right. Below the banner is a navigation bar with the following information: Today's Date: March 19, 2013; Version: 1.0; Home; Logout; User ID: lvssuprSL01; License Number: 555-300-678; Help. The main content area is titled 'LVS Main Menu' and contains a list of five menu items: 'Check for Changed Receiver's License', 'Check for Changed Receiver's License - Batch Process', 'Verify Receiver's License', 'Verify Receiver's License - Batch Process', and 'Query Verification Activity'. A red arrow points to the 'Verify Receiver's License' item. At the bottom of the page, there is a footer with 'Privacy Policy | Site Disclaimer'.

U.S. NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

LVS
License Verification System

Today's Date: March 19, 2013 Version: 1.0 Home Logout
User ID: lvssuprSL01 License Number: 555-300-678 Help

LVS Main Menu

- [Check for Changed Receiver's License](#)
- [Check for Changed Receiver's License - Batch Process](#)
- [Verify Receiver's License](#)
- [Verify Receiver's License - Batch Process](#)
- [Query Verification Activity](#)

Privacy Policy | Site Disclaimer



Enter information for the license you are verifying and click “Verify”

The screenshot shows the LVS web application interface. At the top, there is a header with the U.S. NRC logo and the LVS logo. Below the header, there is a navigation bar with the following information: Today's Date: March 19, 2013; Version: 1.0; Home; Logout; User ID: lvssuprml01; License Number: 123-456-789; Help.

Verify Receiver's License

* indicates required field

Receiver Agency * :

Receiver License Number * :

Amendment Number :

Issue Date : (mm/dd/yyyy)

Privacy Policy | Site Disclaimer



The license will be displayed. Verify the quantity, form, and location of use. Then select “Complete Verification” and click Submit.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

LVS
License Verification System

Today's Date: April 29, 2013 Version: 1.0 Home Logout
User ID: hvzsuprSL01 License Number: 555-300-678 Help

Verify Receiver's License

Page 1 of 3 100%

NRC FORM 374 U.S. NUCLEAR REGULATORY COMMISSION PAGE 1 OF 3 PAGES
Amendment No. 06

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below, to use such material for the purposes(s) and at the place(s) designated below, to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with application dated February 21, 2003,	
1. mxxx, Inc. (USA)	3. License number xxx-xxxx-xxxxxx as provided in its entirety to read as follows:	
2. P. O. Box 1111 City, State 14120	4. Expiration date: September 30, 2013	
	5. Docket No. xxx-xxx-xxx-xxxx	
	Reference No. xxx-xxx-xxx-xxxx	
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. & B. Hydrogen-3	A. & B. Sealed light sources (mxxx-tec Models 4001, 4002, and 4003)	A. & B. Not Applicable (See Condition 12)

9. Authorized use:

- A. Pursuant to Section 32.14, 10 CFR Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," the licensee is authorized to distribute timepieces, hands and dials containing sealed tritium light sources to persons exempt from licensing pursuant to Section 30.15, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.
- B. Pursuant to Section 32.32, 10 CFR Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," the licensee is authorized to distribute timepieces containing sealed tritium light sources as specified in Condition 10 of this license to persons exempt from licensing pursuant to Section 30.15, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.

10. Luminous timepieces may be distributed pursuant to Condition 9.B of this license provided the amount of hydrogen-3 contained in each timepiece does not exceed the amount specified in the following table:

CONDITIONS

Save / Print PDF Cancel

Under Timely Renewal:

- Complete Verification
- Unauthorized Request

Reason Code:
Select Reason Code

Submit



The Verification Confirmation is Displayed



U.S. NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment



LVS
License Verification System

Today's Date: March 19, 2013 Version: 1.0 [Home](#) [Logout](#)

User ID: lvssuprml01 License Number: 123-456-789 [Help](#)

Verification Activity

Supplier Agency	Supplier License Number
Maryland Department of the Environment	123-456-789

Receiver Agency	Receiver License Number	Amendment Number	Issue Date
California Department of Public Health	322371201E	1	

Verification Date	Verification Result	Reason Code
03/19/2013	Verification Completed	

Official Use Only

[Privacy Policy](#) | [Site Disclaimer](#)



Unauthorized Request

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

LVS
License Verification System

Today's Date: April 29, 2013 Version: 1.0 Home Logout
User ID: hvzuprSL01 License Number: 555-300-678 Help

Verify Receiver's License

Page 1 of 3 100%

NRC FORM 374 U.S. NUCLEAR REGULATORY COMMISSION PAGE 1 OF 3 PAGES Amendment No. 06

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below to use such material for the purposes(s) and at the place(s) designated below to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

1. Licensee 1. mxxx, Inc. (USA) 2. P. O. Box 1111 City, State 14120	3. License number xxx-xxxx-xxxxxx 4. Expiration date, September 30, 2013 5. Docket No. xxx-xxxx-xxxxxx Reference No. _____	
6. Byproduct, source, and/or special nuclear material A. & B. Hydrogen-3	7. Chemical and/or physical form A. & B. Sealed light sources (mxxx-tec Models 4001, 4002, and 4003)	8. Maximum amount that licensee may possess at any one time under this license A. & B. Not Applicable (See Condition 12)

9. Authorized use:

A. Pursuant to Section 32.14, 10 CFR Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," the licensee is authorized to distribute timepieces, hands and dials containing sealed tritium light sources to persons exempt from licensing pursuant to Section 30.15, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.

B. Pursuant to Section 32.32, 10 CFR Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," the licensee is authorized to distribute timepieces containing sealed tritium light sources as specified in Condition 10 of this license to persons exempt from licensing pursuant to Section 30.15, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.

CONDITIONS

10. Luminous timepieces may be distributed pursuant to Condition 9.B of this license provided the amount of hydrogen-3 contained in each timepiece does not exceed the amount specified in the following table:

Under Timely Renewal:

Complete Verification
 Unauthorized Request

Reason Code:
Select Reason Code

Submit

Save / Print PDF **Cancel**



Cannot Verify the License

The screenshot shows the LVS web application interface. At the top, there is a header with the U.S. NRC logo and the LVS logo. Below the header, a navigation bar contains links for 'Home', 'Logout', 'Help', 'Today's Date: March 19, 2013', 'Version: 1.0', 'User ID: lvssuprml01', and 'License Number: 123-456-789'. The main content area is titled 'Verify Receiver's License' and includes a 'Verify' button. A red-bordered dialog box is overlaid on the page, displaying the message: 'Contact Agency Alert' followed by 'System cannot verify request at this time. Contact the Regulatory Agency.' and an 'OK' button. The dialog box also contains a dropdown menu on the right side. At the bottom of the page, there are links for 'Privacy Policy' and 'Site Disclaimer'.



Manual Verification

Manual License Verification Procedure

Home > Nuclear Security and Safeguards > Radioactive Material > ISMP > LVS > Manual License Verification Procedure

Manual License Verification Procedure

The purpose of this procedure is to guide licensees transferring Category 1 and/or Category 2 quantities of radioactive materials to verify licenses outside of the License Verification System (LVS), and for Regulatory Agencies to respond to such requests.

Steps for Licensees:

1. Contact the LVS Help Desk by phone at 1-877-671-6787 or by email at LVSHelp.Resource@nrc.gov.
2. Be prepared to provide the following information to the LVS Help Desk representative:

Transferring Licensee information:

- a. License-issuing Agency
- b. Licensee name
- c. License number
- d. Contact name and title
- e. Contact phone
- f. Contact email
- g. Contact fax number



Manual Verification

The Licensee Must Keep a Copy of the Verification Outcome from the Help Desk

OFFICIAL USE ONLY - SECURITY-RELATED INFORMATION			Submit by Email
NRC FORM 749 <small>(MM-YYYY)</small>		U.S. NUCLEAR REGULATORY COMMISSION	
		<small>APPROVED BY OMB: NO. 3160-XXXX</small>	
MANUAL LICENSE VERIFICATION REPORT		<small>EXPIRES: (MM/DD/YYYY)</small> <small>Estimated burden per response to comply with this mandatory collection request: 10 minutes. This collection is required. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (7-5 P3), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to info@nrc.gov. Resource: nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10001, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.</small>	
<small>Sections A-B to be completed by LVS Help Desk. Sections C-D instructions (licensee to provide): Complete sections C and D below for NRC or Agreement State licensees needing to verify a license outside of the License Verification System. For issues with submitting this form, please contact the LVS Help Desk: 1-877-671-6787.</small>			
A. CONTACTED VIA <input type="checkbox"/> Phone <input type="checkbox"/> E-mail		B. DATE (MM/DD/YYYY)	
C. TRANSFERRING LICENSEE INFORMATION			
C.1 Agency (issuing Agency for license) <input type="text"/>			
C.2 Licensee Name <input type="text"/>			
C.3 License Number <input type="text"/>			
C.4 Contact Name and Title <input type="text"/>			
C.5 Contact Telephone Number <input type="text"/>		C.7 Contact Fax Telephone Number <input type="text"/>	
C.6 Contact E-mail Address <input type="text"/>			
D. RECEIVING LICENSEE INFORMATION			
D.1 Agency (issuing Agency for license) <input type="text"/>			
D.2 Licensee Name <input type="text"/>			
D.3 License Number <input type="text"/>		D.4 Amendment Number <input type="text"/>	
D.5 Issue Date <input type="text"/>			
D.6 Authorized Location <input type="text"/>			
D.7 Material(s) of concern being requested		D.8 Chemical/Physical Form	D.9 Quantity/Activity/Unit (being requested)
1. <input type="text"/>		1. <input type="text"/>	1. <input type="text"/>
2. <input type="text"/>		2. <input type="text"/>	2. <input type="text"/>
3. <input type="text"/>		3. <input type="text"/>	3. <input type="text"/>
4. <input type="text"/>		4. <input type="text"/>	4. <input type="text"/>
<small>Sections E-F Instructions (Agency representative to provide): Verify the information in Section D above and make sure that all information provided is valid and the authorized location, materials and quantities being requested are authorized on the recipient's license. Record the verification outcome below. Return the filed form via e-mail to the LVS Help Desk.</small>			
E. VERIFIER'S INFORMATION			
E.1 Verifier's Name <input type="text"/>			
E.2 Verifier's Telephone Number <input type="text"/>		E.3 Verifier's Fax Telephone Number <input type="text"/>	
E.4 Verifier's E-mail Address <input type="text"/>			
F. VERIFICATION OUTCOME			
F.1 Verification Date <input type="text"/>			
F.2 Verification Outcome		<input type="checkbox"/> Requested materials, quantities, and authorized location are authorized on the license <input type="checkbox"/> Requested materials, quantities, and authorized location are not authorized on the license	
		<input type="checkbox"/> Other	
F.3 If other, please explain: <input type="text"/>			
<small>NRC FORM 749 (MM-YYYY)</small>		<small>OFFICIAL USE ONLY - SECURITY-RELATED INFORMATION</small>	



Questions



LVS Helpdesk – 1-877-671-6787

LVSHelp.Resource@nrc.gov

<http://www.nrc.gov/security/byproduct/ismplvs.html>

User Guide and Additional Information on the Webpage!



Wrap-Up

- Discussion and Questions
- Point of Contact:
 - Cheryl Rogers
 - 608-266-8135
 - cheryl.rogers@wi.gov