Illinois Emergency Management Agency



Security Lessons Learned Gary Forsee March 6, 2019



Objectives

- Discuss transition from "IC's" to 32 IAC Part 337
- Identify the most common security program citations
- Insight into the IEMA inspection process
- Highlight available resources and guidance





Security Lessons Learned

NRC Orders

Increased controls were mandated by Nuclear Regulatory Commission (NRC) via two orders:

- 2005: Requirement to implement access control program, surveillance program, and law enforcement response plan.
- 2007: Requirement to include fingerprinting for personal identity verification and FBI criminal history records check for all personnel approved for unescorted access to an irradiator room.

- 2005 NRC Access Control Order
- 2007 NRC Background Check Order
- March 2013 10 CFR Part 37
- Feb. 2016 32 Ill. Adm. Code Part 337

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Security Lessons Learned

- Initial transition, Agency took a facilitating approach
- Three years post-implementation, all licensees have now had an inspection under 32 IAC Part 337
- Opportune time and opportune forum to recognize we have turned the page on implementation.
- As a result, the incidence of security violations has increased and exceeds the number observed for health & safety.



Security Lessons Learned



 As we focus on 'security culture', 'security compliance' should now be well established.





- That having been said, the Agency's goal remains one of facilitating compliance and assisting in the development of robust radiological source security.
- To that end, I want to walk through the most commonly cited violations.
 - (1) physical security requirement
 - (9) documentation and procedural requirements
 - Largely mirrors NRC RIS 2018-01





- Access Authorization Programs 32 III. Adm. Code 337.1020
 - Develop, implement and maintain procedures which address
 approval, denial and terminating access authorization; notifying such
 individuals and documenting the basis for approval/denial.
- Written Security Plan 32 III. Adm. Code 337.2020
 - Develop a written security plan <u>specific to its facilities and operations</u>
 - Approved by the person in charge of the overall security of the licensee



- Security Plan Implementing Procedures 32 Ill. Adm. Code 337.2020(b)
 - Develop and maintain written procedures that document how the physical protection requirements of Subpart C and the security plan will be met.
- Reviewing Official 32 III. Adm. Code 337.1020(b)
 - The Reviewing Official, (formerly the T & R official) is subject to a full background screening including fingerprinting. The licensee is required to submit all RO names under oath and affirmation that the individual is deemed trustworthy and reliable.



- Background Checks & Consent 32 III. Adm. Code
 337.1020(a,c and h)
 - Conduct full background checks on individuals seeking unescorted access. A signed consent form required prior to conducting the background check. Maintain both a current list of individuals approved, as well as previously approved individuals.
- Annual Reviews 32 III. Adm. Code 337.1070 and 2080
 - Licensees shall conduct annual reviews of the access authorization program and the physical security program.



- LLEA Coordination- 32 III. Adm. Code 337.2030
 - Licensees shall document coordination with LLEA on at least a 12
 month frequency, which includes providing LLEA with a description of
 facilities, quantities of radioactive material, description of security
 measures and request for a timely response.
- Annual & Refresher Training 32 III. Adm. Code 337.2020
 - Documented initial and annual refresher training on the security plan commensurate with duties





Inspection Process

- In office review:
 - Review NSTS Inventory and annual reconciliations
 - Identify previous violations
 - Identify incidents or documented issues
 - Review RO determinations, license conditions and authorizations
- On Site:
 - Pre-licensing Inspection
 - Determine the security program management structure





Inspection Process

- On Site (continued):
 - Reconcile inventory
 - Determine extent of access to Cat 1 & 2 material
 - Test physical components of the security system
 - Assess T&R'd individuals knowledge of the security plan & regs
 - Checklist Items:
 - Assess document security, access and retention
 - Review implementing procedures and compare against observations
 - Record review (training, annual reviews, consent forms, T&R determinations, testing)



Inspection Process

- Checklist Items (continued)
 - Line item review of all applicable 32 IAC Part 337 requirements
- Inspection expectations:
 - Average 4 hours depending on scope of program
 - Failures in physical protection measures require immediate address
 - Generally conducted in concert with radiation safety inspection
 - Two separate letters, depending on the role of the Reviewing Official





Available Guidance

- NRC Guidance documents are available:
 - NUREG 2155: "Implementation Guidance for 10 CFR Part 37,
 "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material", Jan. 2015

http://www.nrc.gov/reading-rm/doc-collections/nuregs

- NUREG 2166: "Physical Security Best Practices for the Protection of Risk-Significant Radioactive Material", May 2014
 http://www.nrc.gov/reading-rm/doc-collections/nuregs
- Nuclear Regulatory Commission RIS 2018-01. Published 1/22/18, errata 3/1/18.

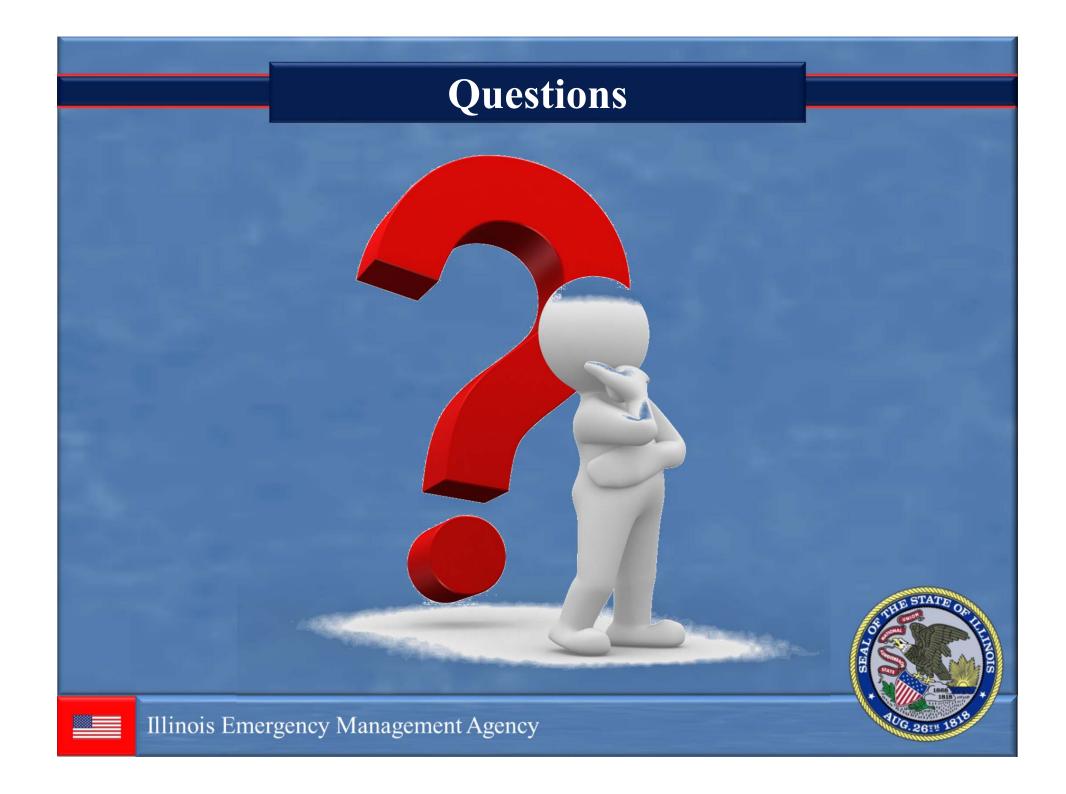




Summary

- Generally, the physical aspects of security systems are in place and well understood
- Violations are largely limited to administrative records and documented plans
- Updating your programs using the aforementioned regulations and guidance will help ensure all radioactive sources are secured from malevolent use. As always, please contact the Agency if you have any questions regarding the security of radioactive material.





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