

March 13, 2014

MEMORANDUM TO: Adelaide Giantelli, Chief, Source Management and Protection Branch, MSSA, FSME

FROM: Paul Goldberg, Source Management and Protection Branch, MSSA, FSME **/RA/**

SUBJECT: Questions and Answers Concerning the Application of 10 CFR Part 37 to Licensees with Part 73 Security Plans

The attached questions and answers are responses from the U.S. Nuclear Regulatory Commission (NRC) staff, approved by the Office of General Counsel, to questions from the Nuclear Energy Institute (NEI) on how 10 CFR Part 37, Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material, applies to nuclear reactors and other facilities with security plans under 10 CFR Part 73. They were made public on the NRC website at <http://www.nrc.gov/security/byproduct/nei-pt-37.pdf> and provided to NEI on October 9, 2013.

	Question	Staff Answer
1	<p>In the FR notice II.A.3-(16925) When the NRC rescinds the orders for NRC Licensees, will the orders be declassified from SGI-M at that time? Also will the declassification have an impact on Agreement State Licensees that may have similar orders that are not rescinded at the same time?</p> <p>Will the NRC list the NRC orders that are being rescinded by Part 37 one year after the final publication date? (78 FR16925)</p>	<p>The NRC staff proposed a direct final rule to the Commission (SECY-13-0045) that would remove the Safeguards Information – Modified Handling (SGI-M) designation of security-related information. The direct final rule applies to any panoramic and underwater irradiator licensees that possess more than 370 TBq (10,000 Ci) of radioactive material, Manufacturing and Distribution (M&D) licensees, and any licensee that transports small quantities of irradiated reactor fuel that weigh 100 grams or less in net weight or category 1 quantities of byproduct material whether the facility is licensed by the NRC or an Agreement State. Irradiated fuel consists of spent fuel pellets, and does not include low levels of contamination on equipment, samples, or in low level waste.</p> <p>The rule package was approved by the Commission in SRM-SECY-13-0045 on August 6, 2013 (ML13225A473). NRC will provide additional guidance on disposition of SGI-M material. Once the rule is effective, the NRC will rescind the orders by issuing letters to the licensees that received orders. The implementation plan that was included in SECY-11-0170 provides tables that list the orders the agency planned to rescind.</p> <p>Agreement State licensees will continue to be subject to the SGI-M provisions of the orders until the NRC rescinds the orders after the Agreement State adopts the provisions of 10 CFR Part 37. Once an Agreement State adopts the requirements of 10 CFR Part 37 and the provisions are effective in the State, the NRC will rescind all security orders for the licensees in that State.</p>
2	<p>In the FR notice II.A.11- The reference to Licensees in an Agreement State is applicable to 10 CFR Part 30 Licensees and not 10 CFR Part 50, 52 Licensees whose license also authorizes use of Part 30, 40, and 70 material. Please confirm since the Agreement States have three years to issue compatible requirements.</p>	<p>The question (78 FR16927 II.A.11) asks when the final rule will be effective. NRC licensees must comply with the final rule for 10 CFR Part 37 one year after its publication date which was March 19, 2013. Therefore, if your possession of byproduct material is authorized by an NRC license, you are required to be in compliance with Part 37 by March 19, 2014.</p> <p>The Agreement States are required to issue compatible requirements within 3 years of the publication date of the final rule (March 2016). If your possession of byproduct material is authorized by an Agreement State license, you must comply with the compatible requirements of that Agreement State on the date specified by the Agreement State.</p>
3	<p>Question #3 FRN II.A.4 (16925)-Does the NRC expect the reactor security plan required by part 73 to include specific requirements related to radiography sources, Category 1 and 2 sources, etc.</p>	<p>Note: The NRC staff is addressing questions 3, 4, 8, 9, 10 and 11 in a single consolidated response because the questions are very similar and all pertain to the exemption language in §37.11(b).</p> <p><u>Security Plans</u> - 10 CFR 37.11(b) provides that “any licensee’s NRC-licensed activities are exempt from the requirements of subparts B and C of this part to the extent that its activities are included in a security plan required by 10 CFR Part 73 (Part 73) of this chapter.”</p>

<p>Question #4 Part 37.11(b) – Is the expectation based on the requirement that the Licensee’s Physical Security Plan (required by part 73) include elements of the requirements from part 37 subparts B and C?</p> <p>Question #8 Part 37.11(b) – I am a Part 50, 52 licensee and have a dosimetry calibrator that is greater than a category 2 quantity stored inside of my protective area. What do I need to do to meet the exemption requirements of this section?</p> <p>Question #9 Part 37.11(b) – I am a Part 50, 52 licensee and have a dosimetry calibrator that is greater than a category 2 quantity stored outside of my protective area but inside of the owner controlled area. What do I need to do to meet the exemption requirements of this section?</p> <p>Question #10 Please explain NRC’s expectations for licensees with Part 73 security programs that elect to protect Category 1 and 2 materials under their Part 73 security programs. How does NRC envision this being implemented – please discuss any expectations for updates to physical security plans. Please discuss which elements of Part 73 would be sufficient to implement.</p> <p>Question #11 Physical protection under Part 73 is not the same for all licensees (e.g. power reactors and fuel cycle facilities). Will licensees that elect to protect Category 1 and 2 materials under Part 73 be afforded flexibility with respect to the different levels of protection contained within the regulations?</p>	<p>Therefore the licensee can choose to protect risk-significant (IAEA Category 1 and 2) byproduct material (hereafter referred to as risk significant byproduct material) using a Part 73 physical security plan (Part 73 plan) approved by the NRC, or in a separate 10 CFR 37 security plan (Part 37 plan). If the licensee is using its Part 73 plan to secure materials, he should document how they are protected against theft and diversion.</p> <p><u>Part 73 Security Plans</u> - If a licensee chooses to protect the material using a Part 73 plan, then the licensee must revise the Part 73 plan and procedures to include protection of risk significant byproduct material (since most Part 73 plans are only designed to protect special nuclear material). If revisions are made to a Part 73 plan, the updates must be submitted to NRC in accordance with §50.54, and §70.32, as applicable. The documentation should identify the 10 CFR Part 73 protective measures that are being credited (e.g., background investigations, access controls, and physical protection (such as access controls, physical barriers, intrusion alarms, weapons, tactical response).</p> <p>Under a Part 73 plan, the level of effort required to ensure equivalent protection to Part 37 requirements will depend on the location of the material and how that location equates with the “security zones” described in 10 CFR §37.47, as well as the security measures that are in place for that location. Generally, if risk significant byproduct material is inside the protected area (PA) of a power reactor, ISFSI or Category I SNM facility, the existing physical security measures required by Part 73 for the PA would provide protection equivalent to or greater than that required by the 10 CFR Part 37 performance requirements.</p> <p>However, if the risk significant byproduct material is outside the PA, a Part 73 plan is not likely to provide equivalent protection (unless substantially modified to meet the performance requirements of 10 CFR Part 37). If using a modified Part 73 plan for areas outside the PA, the modified plan must provide documentation describing how the plan provides a level of protection equivalent to 10 CFR Part 37, Subparts B and C. Licensees would also have the option of moving the risk-significant material into the PA.</p> <p><u>Part 37 Security Plans</u></p> <p>In lieu of a modified Part 73 plan, licensees may choose to develop a 10 CFR Part 37 security plan (Part 37 plan). A Part 37 plan may incorporate by reference, and take credit for, the protective measures of a Part 73 plan (thereby eliminating the need to revise a Part 73 plan to include protection of risk significant quantities of byproduct material).</p> <p>Part 37 plans that do not rely on a revised Part 73 plan shall establish, describe, and document the protective measures</p>
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		<p>necessary to achieve the performance objectives of Part 37 plans are not required to be submitted to NRC.</p> <p>Note 1: Activated material is defined as neutron irradiated objects (objects internally contaminated with radioactive material are not considered activated materials).</p> <p>Note 2: Large area surface contamination (e.g., in a reactor building) is not included in the determination of aggregated material, since this material is not subject to theft in quantities exceeding Category 1 or 2 quantities.</p> <p><u>Removal of Radioactive Material from Security Zones</u></p> <p>Security plans should address temporary security arrangements for removal of risk significant byproduct material from security zones and establishment of temporary security zones. Location of temporary security zones need not be documented in the Part 73 plan or procedures</p>
5	<p>Part 37.11(c)-Do items 1-4 apply to a steam generator or reactor vessel head mausoleum? Typically these storage facilities may not be identified as radioactive waste storage.</p>	<p>Part 37 focuses on protection of risk significant quantities of radioactive material and does not name specific facilities, components, or areas that need to comply or do not need to comply.</p> <p>Walls and component parts that become activated throughout their life are not considered to be waste until they are no longer useful for their intended purpose. Licensees are responsible for making the determination of when material will be no longer useful (considering the potential for spare parts, or recycling into other products or sale for other purposes). The regulations in 10 CFR Part 37 do not apply to activated material in walls and components during the operating life of a reactor, hot cell, or accelerator. Once the licensee removes activated material from use (whether from maintenance or during decommissioning) and declares the rubble or removed components as waste, then 10 CFR Part 37.11(c) criteria would apply.</p>
6	<p>Part 37.11(c) – Does the criteria 'weighs less than 2,000 kg (4,409 lbs)' apply to discrete sources, ion-exchange resins, activated material or does that criteria only apply to activated material? [NUREG 2155 includes “and activated material that weighs less than 2,000 kg (4,409lbs)”]</p>	<p>The 2000 kg criterion applies only to activated material (activation of objects such as metal components or individual concrete slabs that become radioactive through exposure to neutron flux).</p>

7	FRN Response to Comment B43- The response implies that the 10 CFR part 73 procedures address the content of the required procedures under 10 CFR part 37. Is this specific to subpart B or all subparts? Also is this requirement codified and what is the citation in 10 CFR part 37?	The comment and NRC response both pertain only to 10 CFR Part 37, Subpart B. The commenter noted that “ the procedures used for 10 CFR Part 73 background investigations and updating of background investigations, etc., should be considered adequate to meet the intent of 10 CFR Part 37.” NRC agreed that a licensee does not need to maintain two sets of procedures for access authorization. Grandfathering of individuals found to be trustworthy and reliable under the provisions of 10 CFR Part 73 is addressed in § 37.25(b).
12	Can NRC please explain in detail the exemption in 37.11(c) as it applies to LLW?	<p>The security requirements of Part 37 Subparts B, C and D apply in their entirety to the following wastes that contain Category 1 and 2 quantities:</p> <ul style="list-style-type: none"> • discrete sources • ion-exchange resins • activated material < 2,000 kg (i.e., irradiated metal or concrete) <p>Other waste forms are exempted from the security requirements of Subpart B, C, and D. However, these waste forms, such as contaminated clothing, gloves, soil, or low specific activity waste, must meet the security requirements of §37.11(c) (1) through (c) (4) if they contain Category 1 and 2 quantities.</p>
13	What are NRC’s expectations for implementation of 37.11(c)(1-4)? Specifically, has NRC considered what would be acceptable to meet the intent of 1-4?	<p>NRC believes the language in the rule is clear as written in 37.11(c), which states that the licensee shall implement the following requirements to secure the radioactive waste:</p> <p>§ 37.11(c)(1) Use continuous physical barriers that allow access to the radioactive waste only through established access control points;</p> <p>§ 37.11(c)(2) Use a locked door or gate with monitored alarm at the access control point;</p> <p>§ 37.11(c)(3) Assess and respond to each actual or attempted unauthorized access to determine whether an actual or attempted theft, sabotage, or diversion occurred; and</p> <p>§ 37.11(c)(4) Immediately notify the LLEA and request an armed response from the LLEA upon determination that there was an actual or attempted theft, sabotage or diversion of the radioactive waste that contains category 1 or category 2 quantities of byproduct material.</p>

14	<p>Would it be acceptable to implement physical controls as described in RG 8.38, section 1.5, specifically applying substantial barriers (e.g., bolted access covers, covers that require heavy equipment to open) as an alternate means to meet the requirements of 10 CFR 37.11(c)(2) and (3)?</p>	<p>No. The physical controls described in Regulatory Guide 8.38 only provide reasonable assurance that the area is secure against unauthorized access by individuals trained in radiation protection. This is quite different from the intent of Part 37, which is to prevent theft or diversion of risk-significant material for malicious purposes, or acts of sabotage.</p> <p>The specific measures described in the question may meet the requirements of 10 CFR 37.11 (c)(1) and (c)(2). However, the described physical control measures do not appear to address the 10 CFR 37.11 (c)(3) requirement to assess and respond to actual or attempted unauthorized access in order to determine whether an actual or attempted theft, sabotage, or diversion occurred or the 10 CFR 37.11 (c) (4) requirement to notify local law enforcement and request an armed response upon determination of an actual or attempted theft, sabotage, or diversion.</p> <p>A request for alternative measures to 10 CFR 37.11 (c)(1), (c)(2) and (c)(3) would need to be reviewed on a case by case basis as an exemption request under 37.11(a).</p>
15	<p>Can NRC please explain how safeguards information is expected to apply to Part 73 licensees? If licensees choose to protect Category 1 and 2 materials under Part 73, will the scope of SGI maintained at these facilities increase?</p>	<p>The scope of SGI maintained at a facility would not increase. The physical security plan required under Part 73 is designated SGI. Information added to that plan for the purposes of compliance with Part 37 would not change the designation. No new SGI requirements are associated with Part 37. As noted in question 1, a forthcoming rule change will remove the SGI-M designation for protected information. The requirements of the orders for protection of SGI-M will remain in effect in the meantime.</p>
16	<p>Can NRC address how/when it will rescind RAMQC orders and discuss how SGI will be addressed in Subpart D?</p>	<p>As discussed in the Part 37 Implementation Plan (ML113290229), NRC security orders will be rescinded by letter in a timeframe to coincide with the compliance date for the rule. As noted in question 1, a rulemaking is underway to remove the SGI-M designation for protected information associated with Category 1 and 2 materials. The requirements of the orders for protection of SGI-M will remain in effect in the meantime. NRC Orders, related security plans, and any other documents that are designated SGI-M must be protected in accordance with the orders until compliance with the requirements of Part 37 is required and the orders are rescinded, at which time the SGI-M materials must be destroyed.</p>
17	<p>Can NRC please discuss the primary differences between Subpart D and RAMQC?</p>	<p>Please refer to the regulatory crosswalk in the Implementation Plan, which includes a comparison of the RAMQC orders and Part 37.</p>
18	<p>Would it be acceptable for licensee's to designate their Reviewing officials (RO) in accordance with 10 CFR 73.56 requirements and not require fingerprints of the RO's to be taken by a law enforcement agency as delineated in 37.23?</p>	<p>Yes, the access authorization programs required by NRC regulations and orders for power reactors, non-power reactors, utilization facilities and fuel facilities are deemed adequate for compliance with Part 37 and licensees need not create a separate program.</p>

19	Would it be acceptable to grant access based on background investigations conducted in accordance with 10 CFR 73.56 (employment history, military, education and personal references) in lieu of the criteria in section 37.25?	Yes, the access authorization programs required by NRC regulations and orders for power reactors, non-power reactors, utilization facilities and fuel facilities are deemed adequate for compliance with Part 37 and licensees need not create a separate program.
20	Would it be acceptable for licensees currently authorized under 10 CFR 73.57 to continue to collect and submit fingerprints directly to the FBI without having to submit the fingerprints to the NRC as specified in 37.27?	Under §73.57(b)(2)(iii) Any licensee currently processing criminal history requests through the FBI pursuant to Executive Order 10450 need not also submit such requests to the NRC. Though not explicitly stated in §37.27, NRC considers that continuing this practice meets the intent of Part 37.