



SECRETARY

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 16, 2012

COMMISSION VOTING RECORD

DECISION ITEM: SECY-11-0170

TITLE: FINAL RULE: PHYSICAL PROTECTION BYPRODUCT  
MATERIAL (RIN 3150-AI12)

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of March 16, 2012.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, appearing to read "A.L. Bates", written over a horizontal line.

Andrew L. Bates  
Acting Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Jaczko  
Commissioner Svinicki  
Commissioner Apostolakis  
Commissioner Magwood  
Commissioner Ostendorff  
OGC  
EDO  
PDR

VOTING SUMMARY - SECY-11-0170

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X				X	2/27/12
COMR. SVINICKI	X				X	2/27/12
COMR. APOSTOLAKIS	X				X	1/19/12 2/15/12
COMR. MAGWOOD	X				X	2/22/12
COMR. OSTENDORFF	X				X	1/24/12

**AFFIRMATION ITEM**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** Chairman Gregory B. Jaczko  
**SUBJECT:** SECY-11 - 0170- FINAL RULE: PHYSICAL  
PROTECTION OF BYPRODUCT MATERIAL  
(3150-AI12)

Approved  X  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS: Below \_\_\_ Attached  X  None \_\_\_

  
\_\_\_\_\_  
SIGNATURE

2/27/12  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  X  No \_\_\_

**Chairman Jaczko's Comments on SECY-11-0170,  
"Final Rule: Physical Protection of Byproduct Material"**

I approve the staff's request to publish a final rule that will add a new Part 37 to Title 10 of the Code of Federal Regulations and to make conforming changes to Parts 20, 30, 32, 33, 34, 35, 36, 39, 51, 71, and 73. This rule will amend the regulations to establish security requirements for the use of Category 1 and Category 2 quantities of radioactive material and for the transportation of small quantities of irradiated fuel. I also approve the staff's recommendations to rescind the security orders on the effective date of the final rule in accordance with the implementation plan, and the staff's recommendation to conduct a rulemaking to remove the SGI-M requirement for certain licensees.

I agree with the approach that the staff has used to include suspicious activities in this rule. I think this will help to identify behaviors or activities that may be a precursor to other, larger plans. Also, I remain concerned about aggregation of sources and I think this rule is a good step in preventing that. I do think, however, that more attention should be paid to Category 2 sources and that this rule should contain requirements for real-time tracking of these sources.

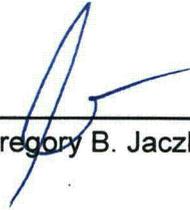
The proposed rule contained requirements for a credit check, and I believe those requirements should remain. Although it should not be the only factor, a credit check helps shed light on the issue of whether someone is trustworthy and reliable. With respect to the issue of transshipments, the staff should continue their work with other Federal agencies on the security requirements for transshipments.

I have stated previously, and I continue to believe, that Part 37 marks an important milestone in the progress that the agency has made in the security area. The staff has done an excellent job shepherding these requirements through the rulemaking process and I am confident they will continue their focus on safety and security while rescinding the security orders that Part 37 replaces. Through its many security initiatives such as this rule, the National Source Tracking System, and the Radiation Source Protection and Security Task Force, the agency has made significant contributions to the national security of radioactive materials.

In addition, the staff should make the following specific changes to the draft Federal Register Notice:

- Revise page 72 to state that: "A licensee can always ask for relief from a particular measure and if the NRC agrees that adequate basis exists **and that it is protective of public health and safety**, it can grant the request."
- Revise page 96 to state that: "The LLEA needs to be notified only if the licensee has determined that an attempted or actual theft, diversion, or sabotage act has occurred or is taking place, **or if the licensee has identified suspicious activities.**"

- Revise page 264 to state that: "The NRC does not object to the use of Federal Express, as long as they continue to meet these requirements."



---

Gregory B. Jaczko

2/27/12

---

Date

**AFFIRMATION ITEM**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** COMMISSIONER SVINICKI  
**SUBJECT:** SECY-11 - 0170- FINAL RULE: PHYSICAL PROTECTION OF BYPRODUCT MATERIAL (3150-AI12)

Approved XX Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:** Below XX Attached XX None \_\_\_\_\_

I approve the staff's recommendation to publish in the *Federal Register* the final amendments to Parts 30, 32, 33, 34, 35, 36, 37, 39, 51, and 73, subject to the attached edits and the following:

- I concur with the staff's determination that the rule, if promulgated, will not have a significant impact on a substantial number of small entities.
- I approve the staff approach to rescind the security orders in accordance with its implementation plan.
- I approve the staff's recommendation to conduct a rulemaking to remove the SGI-M requirement for certain licensees.

I commend the staff's fulsome engagement of the Agreement States and stakeholders. I believe these efforts have improved the overall quality of this final rule.

  
\_\_\_\_\_  
SIGNATURE

02/27/12  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

## A. General Applicability

### 1. *What Action is the NRC Taking?*

The NRC is amending its regulations to impose security requirements for the use and transportation of category 1 and category 2 quantities of radioactive material. The requirements establish the objectives and minimum requirements that licensees must meet to protect against theft or diversion of this material. These requirements are intended to increase the protection of the public against the unauthorized use of category 1 or category 2 quantities of radioactive material by reducing the risk of the theft or diversion of the material. The NRC is also amending the regulations to impose security requirements for the transportation of small quantities (100 grams or less) of irradiated fuel.

### 2. *Why Do the Requirements Need to be Revised?*

Prior to September 11, 2001, the NRC requirements focused on safety and preventing inadvertent or accidental exposure of both workers and the public to these materials. These requirements also provided security for the material. The events of September 11, ~~2011~~2001, made the NRC take a broader look at its requirements and reevaluate what a terrorist might do to obtain these materials. From this effort, the NRC identified several areas where additional requirements were necessary to improve security. The security requirements need to be placed in the regulations so that they are generally applicable to all licensees. Publication of the proposed rule also provided an opportunity for all stakeholders to comment on the proposed requirements.

### 3. *Why Doesn't the NRC Just Keep the Orders in Effect?*

The orders issued by the NRC could stay in place indefinitely. However, the regulations would not reflect current Commission policy or requirements. Imposing long-term requirements through orders has not traditionally been the agency's preferred method of regulation. Orders,

figures for practical usefulness convenience.

Radioactive Material	Category 1 Threshold		Category 2 Threshold	
	Terabecquerels (TBq)	Curies (Ci)	Terabecquerels (TBq)	Curies (Ci)
Americium-241	60	1,620	0.6	16.2
Americium-241/Beryllium	60	1,620	0.6	16.2
Californium-252	20	540	0.2	5.40
Curium-244	50	1,350	0.5	13.5
Cobalt-60	30	810	0.3	8.10
Cesium-137	100	2,700	1	27.0
Gadolinium-153	1000	27,000	10.0	270
Iridium-192	80	2,160	0.8	21.6
Plutonium-238	60	1,620	0.6	16.2
Plutonium-239/Beryllium	60	1,620	0.6	16.2
Promethium-147	40,000	1,080,000	400	10,800
Radium-226	40	1,080	0.4	10.8
Selenium-75	200	5,400	2.0	54.0
Strontium-90 (Yttrium-90)	1,000	27,000	10.0	270
Thulium-170	20,000	540,000	200	5,400
Ytterbium-169	300	8,100	3	81.0

These materials and thresholds are based on the IAEA Code of Conduct. The IAEA published these results in a document titled "Code of Conduct on the Safety and Security of

12. *How Does the NRC Ensure Licensees are Following These Rules?*

The NRC and Agreement States conduct inspections to ensure that licensees are following the requirements. The NRC and Agreement State inspectors will receive training and follow inspection procedures on how to ascertain whether licensees are meeting security requirements. Potential violations that are identified will be processed in accordance with the NRC Enforcement Policy, and depending on the severity of a violation, licensees could be subject to civil or criminal penalties. Additionally, the NRC has developed enforcement guidance to ensure consistency in the enforcement process. Agreement State licensees are subject to the State's enforcement process. Those Agreement State licensees that were issued NRC orders under common defense and security would remain subject to the NRC's enforcement process, until the Agreement State adopts the regulations with its own legally binding requirements.

B. Background Investigations and Access Authorization Program

1. *Who Is Required to Have an Access Authorization Program?*

Any licensee that possesses category 1 or category 2 quantities of radioactive materials at a facility needs to determine whether it needs to have an access authorization program. Only those licensees that permit unescorted access to an aggregated category 1 or category 2 quantity of radioactive material are required to establish and implement an access authorization program. If the material can be accessed by the breach-breach of a single physical barrier, the licensee needs to implement an access authorization program. In addition, any applicant for a license or license amendment to possess category 1 or category 2 quantities of radioactive material at a

point of origin of the shipment and the estimated time and date that shipment will commence; 5) the estimated time and date that the shipment is expected to enter each State along the route; 6) the estimated time and date of arrival of the shipment at the destination; and 7) the contact and telephone number for the point of contact. For the purpose of coordination only, the actual information in the advance notification would not be considered to be SGI-M. Any information that is not available at the time of the initial notification would be provided in a revised notification once the information becomes available.

12. *What Should A Licensee Do If The Shipment Schedule Is Revised Or The Shipment Cancelled?*

If the category 1 shipment schedule is revised or cancelled, the final rule requires the shipping licensee to notify the appropriate States and the NRC.

13. *What Should a Licensee Do If the Shipment Does Not Arrive by the No-Later-Than Arrival Time?*

The final rule requires a licensee that has shipped category 2 quantities of radioactive material to initiate an investigation for any shipment that has not arrived at the receiving licensee's facility by the designated no-later-than arrival time. The no-later-than arrival time is defined as the date and time that the shipping licensee and receiving licensee have established as the time at which an investigation will be initiated if the shipment has not arrived at the receiving facility. The no-later-than-arrival time may not be longer than 6 hours after the estimated arrival time for a shipment of category 2 quantities of radioactive material. A no-later-than arrival time was not included for category 1 shipments as the licensee is required to maintain continuous position monitoring and detect any unauthorized access to or removal of the material immediately. This would enable the shipping licensee of a category 1 shipment to know right away if the shipment was late or experiencing problems.

Comment A10: One commenter stated that the definition for "sabotage" should include a definition of "security system" that is referenced in the definition.

Response: The NRC disagrees with the comment. Security system does not need to be defined in the definition of *Sabotage*. The security system will be different for each licensee as it is the system that a licensee uses to protect its category 1 and category 2 quantities of radioactive material.

Comment A11: Two commenters suggested modifications to the definition for safe haven. Another commenter noted that the provision cannot be implemented. The commenter noted that based on discussions with military and other Federal institutions, material shipments could not be diverted to them under any circumstances. The commenter suggested that safe havens be contacted, confirmed, and identified. The commenter noted that the licensee and carrier are capable of determining safe havens along the route and that past experience has shown that requesting a State to identify safe havens has been fruitless. Two commenters suggested that the NRC work with the States to identify potential safe havens and publish a list with the final rule. One commenter noted that a licensee does not need to work with the State to identify safe havens. Two commenters noted that the term "safe haven" is loosely defined by various agencies and States, and that States do not recognize, identify, or acknowledge that they have such sites. Two commenters noted that DOT removed the term from its regulations because it could not be implemented.

Response: The definition for *safe haven* has been retained in the final rule. Licensees, not States, are responsible for identifying safe havens. Identification of safe havens has been in the regulations for spent fuel transportation for a number of years and was included in the RAMQC Orders for transport of category 1 shipments, so it is not a new concept. If a licensee

proposed rule as it describes five different categories that differentiate sources possessed by various licensees based on quantity as well as use. The commenter also stated that the rule should be limited to source quantities characterized as category 1 and category 2 in the IAEA Safety Guide. The commenter noted that the types of sources used in refineries and petrochemical plants are considered category 3 and according to the IAEA Safety Guide, the types of sources used in refineries and petrochemical plants present less risk than the source quantities in category 1 and 2.

Response: While the NRC agrees that category 3 sources present less risk individually than category 2 sources, the NRC disagrees with the remainder of the comment. Unlike RS-G-1.9, the NRC and the IAEA Code of Conduct do not consider use (e.g., fixed gauges, well logging, and radiography) in the determination of source categorization. Regardless of its intended use, any category 2 quantity may pose a significant risk to individuals, society, and the environment. Additionally, part 37 applies not only to sources, but also to bulk material. The rule also addresses aggregation of radioactive material at or above the category 2 threshold. If several sources are stored together that individually are considered to be category 3 sources, but together form an aggregated category 2 quantity, the attractiveness of the material as a group would be the same as if there were only one category 2 source. If the sources used in the refineries and petrochemical plants are not aggregated, part 37 would not apply.

Comment A26: One commenter indicated that for facilities covered under the Maritime Transportation Security Act, the rule would mean additional burdens, redundancies and confusion. The commenter recommended that for facilities regulated under DHS/DOT Personnel Surety programs, the rule should allow a program of reciprocity to reduce redundancy. The commenter noted that at National Petrochemical & Refiners Association (NPRA) member facilities, the Radiation Safety Officer (RSO) and technicians have intimate

could diminish their focus on ensuring security compliance for existing category 1 and category 2 sources. One commenter noted that the rule would be burdensome on the regulatory agency and LLEAs, as well as licensees.

One commenter suggested placing generic requirements in the rule and then address subsets of licensees in the NUREG-1556 series. One commenter suggested that the proposed rule should be renoticed after making changes with more detail provided as to the actual safety and security benefits to be obtained. One commenter noted that the rule does not conform to the recent draft policy statement on the Protection of Cs-137 Chloride sources.

Response: The NRC understands the concerns of the commenters and has tried to limit the burden while continuing to ensure the adequate safety and security of sources of concern.

The security orders were issued based on the specific knowledge and information available to the Commission at the time the orders were issued. The NRC never intended to simply make generically applicable security requirements identical to the orders. The NRC always intended to consider insights gained from the implementation of the orders and implementation of the inspection program, as well as other factors. A number of changes have been made based on specific public comment. The result of these rule changes significantly reduces the burden of the final rule as compared to the proposed rule. The NRC believes that the provisions in the final rule are necessary to protect the public health and safety and ensure security. There could be some facilities impacted by the rule that were not impacted by the orders. Some facilities, such as reactors and fuel facilities, may be impacted by part 37. There should not be any byproduct material facilities newly impacted by part 37 that were not impacted by the orders.

Comment A49: A couple of commenters stated that the NRC should only include the order provisions in the rule and then start work on developing a strategic rulemaking, which may need to include changes in legislative authority, to develop a part 37 with a more risk-informed

Response: The requirement for nominating a reviewing official has changed in the final rule. A licensee now names the reviewing official and certifies under oath and affirmation, to the NRC, that the reviewing official is trustworthy and reliable. See *also* response to Comment B14.

Comment B18: Two commenters objected to the wording in § 37.23(b)(4) and (5) that implies that the reviewing official permits unescorted access. The commenters agreed that the reviewing official should be the individual who makes the trustworthiness and reliability determinations but asserted that the reviewing official should not be the individual who gives permission for unescorted access. The commenters noted that after a positive determination is made, the actual determinations for unescorted access should be controlled by someone else such as the ~~radiation safety officer~~RSO. The commenters suggested that the two sections be revised to remove the permit unescorted access language. The commenters also suggested that § 37.23(e)(2) be modified by changing the word "permit" to "authorize."

Response: The NRC agrees with the comment. The NRC has revised the language in § 37.23(b)(1) (formerly paragraph (b)(4)) to read: "Reviewing officials are the only individuals who may make trustworthiness and reliability determinations that allow individuals to have unescorted access to category 1 or category 2 quantities of radioactive materials possessed by the licensee." The NRC has removed the provision in § 37.23(b)(5) as it was duplicative of paragraph (b)(4) (now paragraph (b)(1)). The NRC has not revised the language in § 37.23(e)(2) because permit is the term used in the AEA.

Comment B19: One commenter noted that § 37.23(b)(5) is redundant as § 37.23(b)(4) conveys the same requirement.

Response: The NRC agrees with the comment and has removed § 37.23(b)(5) from the rule.

background investigation addresses the good faith presumption. See *also* the response to question B5 in Section II.

Comment B25: One commenter objected to the timing of the submittal of the fingerprints for the reviewing official, noting that the approval process would be timelier if the fingerprints were processed at the same time the licensee is conducting the other elements of the background investigation.

Response: The requirement for NRC approval of the reviewing official has been removed from the rule. The rule requires the licensee to certify that the reviewing official is trustworthy and reliable and to then provide the name of that individual designated as the reviewing official to the NRC. See *also* response to Comment B14.

Comment B26: One commenter noted that many of the items in subparts A through D do not reference SGI, but the requirements in this rule apply, and the inconsistencies must be corrected.

Response: The NRC disagrees with the comment. Requirements for protection of SGI are contained in part 73, not part 37. Part 37 contains appropriate references to the requirements for SGI that are contained in §§ 73.21 and 73.23.

Comment B27: One commenter requested that a section for a master materials licensee to approve reviewing officials at the permittee level facilities be added.

Response: The licensee is now responsible for approving the reviewing official. See *also* the response to comment B14.

Comment B28: One commenter noted that it was not clear how the licensee would comply with the requirement in § 37.25(a)(1) to complete fingerprinting and an FBI identification and criminal history records check for reviewing officials before granting them unescorted access inasmuch as NRC (or the Agreement State) would have the responsibility of reviewing

and that a list of all persons denied or removed from the unescorted access list be maintained (± a month). Another commenter noted that maintaining a list has no value as a licensee may develop a badge system that indicates a person's level of access. Another commenter noted that there was no value in keeping a list since the determination basis has to be documented.

Response: The NRC agrees, in part, and disagrees, in part, with the comment. The NRC agrees that it is not necessary to maintain a list of those individuals not approved for access and has removed the provision. The fact that someone is not included on the access list means that they should not be granted unescorted access to the material, and a second list is not needed. There is currently no mechanism in place to share information among licensees, so there is no benefit in maintaining a list of those not approved for access. The NRC disagrees with the comment to remove the requirement to maintain every change to the list; however, the NRC has changed the retention time to 3 years. The superseded lists are necessary for inspections. If an inspector discovers something during an inspection, the superseded list could be reviewed to determine who had unescorted access during a given time period.

Comment B49: One commenter requested clarification whether the notification required by § 37.27(a)(2) is different from the informed consent required by § 37.23(c)(1).

Response: The informed consent under § 37.23(c)(1) is consent to conduct the background investigation. The notification required by § 37.27(a)(2) is specifically for the FBI criminal history records check. The licensee may develop one consent form that covers both aspects.

Comment B50: In the proposed rule, the NRC specifically invited comment on the appropriate elements for a background investigation. Commenters were requested to provide information on: 1) whether a local criminal history review is necessary in light of the requirement for an FBI criminal history records check; 2) whether a credit history check provides

in consultation with the NRC, had deemed credit history checks significantly useful to provide for the common defense, the checks would have been included within the most recent amendments in section 149 of the AEA. Another commenter noted that Congress has considered passing an act to make it unlawful to base adverse employment decisions on consumer credit reports.

In a CRCPD survey of Agreement States, 70 percent of those responding indicated that they did not have the authority to require a credit history check as part of a background investigation. Some Agreement States indicated that they were not sure if they had the authority to require a credit history check. One State indicated that (assuming it has authority) its administrative procedures would require specific criteria for pass/fail. One commenter noted that there are State laws that prohibit "discrimination" against employees due to credit history and asked how this would affect the credit history check requirement. The commenter noted that a Google search indicated that States that have and/or are considering such laws include: Connecticut, Wisconsin, Hawaii, Illinois, Missouri, New York, Oregon, Washington, and Texas.

One commenter felt that much of the information obtained from a credit history report would already be included in the personal history disclosure. Two commenters stated that for category 2 sources it should be up to the reviewing official to decide if they have enough information to grant unescorted access to a category 2 source without the need for a credit history check. One commenter noted that individuals relieved from the background investigation elements were just as likely to have negative credit history but will not be subject to the same scrutiny. One commenter recommended defining "full credit history," as a licensee can't comply with open-ended requirements. Two commenters noted that this concept had been considered in the working group for the orders but was rejected, and, therefore, should not have been included in the proposed rule.

requirement does not make sense as there would be insufficient information on whether the criminal history will really be the criminal history or just an arrest record.

Response: The NRC believes that periodic reevaluation of an individual's trustworthiness and reliability is important. The reinvestigation is not a complete check. The reinvestigation is limited to the FBI criminal history records check. The relief provided by § 37.29 does apply to the reinvestigation. The licensee would need to check that the individual still meets the relief category.

Comment B68: One commenter questioned whether the reviewing official was subject to the reinvestigation requirement.

Response: The reviewing official is subject to the reinvestigation. The rule text has been revised.

Comment B69: One commenter stated that § 37.25 and § 35.27 have some duplication of information and that sections should be reviewed to avoid duplication.

Response: There is some overlap in the requirements. However, the provisions of § 35.27 apply solely to the fingerprints and FBI criminal history records checks. The provisions of § 37.25 apply to the complete background investigation.

Comment B70: One commenter noted that there is potential for discrepancy between different licensees' basis determination for unescorted access and questioned the wisdom of allowing transfer of an individual's trustworthiness and reliability determination under § 37.27(a)(4).

Response: The commenter is correct that there may be differences between licensees' determination bases for unescorted access. The NRC still believes that there is merit in allowing licensees to transfer information and accept another licensee's determination on an individual. The individual has undergone a background investigation (or met one of the

7 days, experience delays that are beyond the control of the company. Commenters noted that the paperwork for the notifications will be time consuming to produce and, if it is to be valuable, time consuming for LLEAs to read and comprehend. Many noted that there is no practical means to identify the appropriate LLEA, particularly in areas that the licensee is not familiar with, and in some cases a temporary jobsite might cover a very large area with several overlapping jurisdictions, and it can be difficult to determine which agency is the first responder. Commenters noted that many times licensees are notified of the necessity of work on the same day the work is required and don't know 3 days in advance, with one commenter noting that only about 3 percent of its jobs are known 3 days in advance. Commenters noted that these jobs often involve repair of critical oil and gas infrastructure which could be delayed while attempting to determine which LLEA has jurisdiction and coordinating with them, creating significant cost to the industries with no benefit. One commenter suggested that, if the provision was retained, it be modified to require the notification be made within three business days subsequent to beginning work as this would alleviate some of the problems created by advance notifications.

Some commenters noted that the LLEAs do not want to receive these notifications and would be unprepared to receive the notifications. Some commenters thought that the contacts with the LLEA without possible response from the LLEA may accomplish nothing but aggravation and frustration for the LLEA. One commenter (a State) indicated that, based on a survey of LLEAs, the LLEAs want to know about a temporary jobsite, no matter how long the site will be used, so they can plan for emergencies. The commenter indicated that the LLEA would like a standardized form to be used by States that clearly indicates the high priority of the information. Many commenters noted that the 911 system is the best tool if there was an attempted theft and that responders would quickly respond once they realized that radioactive

where they will be working in advance. Locations, particularly along pipelines, shift consistently making it difficult to know who to contact.

Comment C49: One commenter suggested that instead of mandating the licensees to take on this burden, ~~instead~~ the Commission's approach should be to encourage licensees to offer LLEAs their expertise and offer some form of training to the local departments.

The commenter noted that the Increased Control Orders require the licensees to establish their presence with LLEAs as the facilities clearly are a much more attractive target to an attack than the mobile fleets. The commenter suggested that an adjustment in the rule encouraging a closer relationship in this area would be more accepted by all parties involved and would not overly impact said parties financially or on a personnel basis. Creating a program that encourages and supports licensees and LLEAs working together would or could create close relationships that will have far more impacting and lasting results than calls to the departments advising them of work that is proposed to last more than 7 days.

Response: The NRC has not included the notification provision for work at temporary jobsites in the final rule, and there are no requirements for training affected LLEAs. See the response to comment C48. The NRC recognizes the benefits to licensees of having a close working relationship with the LLEA for the security of any jobsite, permanent or temporary. Licensees are free to take whatever actions they feel are appropriate to develop this type of working relationship.

Comment C50: One commenter noted that the temporary jobsite notification could be via e-mail and that e-mail is generally unsecured unless it is encrypted or sent as password protected attachments. The commenter noted that the rule does not contain any restrictions as outlined in Regulatory Issue Summary 2005-31.

commenter stated that these two concepts seem to conflict with each other and if the common physical barrier concept is not acceptable, then many more licensees will fall under these requirements due to the aggregation of radioactive material. The commenter noted that it would cost over \$200,000 to develop continuous barriers and redo calibrations, procedures, etc., if it can be done at all. The commenter suggested allowing the licensee to propose measures to compensate for the lack of a continuous barrier when that barrier would obstruct the use of the radioactive material for its intended purpose and when there is no available alternative.

Response: A continuous barrier is not the only method that a licensee can use to meet the requirement. Direct observation is also allowed, as is a combination of barrier and direct observation. A continuous barrier does not have to be expensive; it can be a metal cage or walls. The commenter seems to believe that unauthorized individuals cannot be in a security zone. This was not the intent of the rule. Unauthorized individuals can have access to the security zone as long as they are escorted by an approved individual. The rule language has been clarified, and additional information has been added to the implementation guidance. The licensee can establish the boundaries of the security zone ~~to what works~~ as appropriate for a particular facility; the rule does not dictate where the security zone is located. In most cases, whatever a licensee used to meet the orders will also meet the part 37 requirements. The Increased Control Orders did not use the term "security zones" but the concept was a factor.

Comment C53: One commenter expressed concern with the security zone concept at temporary jobsites. The commenter noted that implementation would require additional personnel and expense, and the security zone will require areas that will be larger than the radiation areas. Another commenter noted that the concept could cause confusion in certain types of jobsites where aggregation of multiple low level sources would constitute a security zone. The commenter provided the example of petrochemical plants that use low level sources

medical institutions, universities, and gauging. The commenter noted that the requirement has significant implication and needs to be carefully considered to avoid unintended adverse consequences.

Response: The licensee is not required to conduct a weekly physical inventory of the category 2 quantities of radioactive material; other methods can be used. The other means allowed by the rule ~~is-are~~ intended to provide the licensee with the flexibility to use the method that works best for its facility. A licensee could use methods to detect removal of the material from the security zone. If a licensee is currently using an agreed on method, the method should continue to meet the intent of the requirement. Any of the methods deployed for category 1 materials could also be used for category 2 materials. Additional information is available in the implementation guidance.

Comment C58: One commenter requested clarification on where an NRC security zone at a licensee site and a DOT security zone for transport take effect for shipments leaving a facility. One commenter noted that NRC should clarify at what point the shipment is under DOT rules and not under part 37. The commenter asked if this occurs once a shipment of category 1 or category 2 radioactive material is prepared (DOT paperwork in possession of the driver) but still on a licensee's site. The commenter noted that a temporary security zone cannot accompany the shipment until it physically exits the licensee's property or jobsite.

Response: It is the licensee's responsibility to implement the requirements of part 37 throughout the shipment regardless of the location.

Comment C59: One commenter noted that § 37.47(d) is not clear whether the regulation requires a physical presence for maintaining continuous surveillance, or whether the continuous surveillance may be by remote monitoring. The commenter also noted that the wording implies that the licensee must provide an approved individual and questioned whether

Comment D28: One commenter suggested adding an exemption to § 37.79 for shipments transported as Exclusive Use, in accordance with 49 CFR 173.441. The commenter noted that package tracking systems are necessary when a carrier handles multiple consignments on single vehicles and when packages traverse through delivery hubs. The commenter noted that an exclusive use shipment removes the risk of lost or misdirected packages and would provide the same level of control as a package tracking system. The commenter noted that adding the exemption would give the licensee the ability to transport their own category 1 materials.

Response: The NRC disagrees with the comment and does not believe that an exemption is appropriate for shipments transported as Exclusive Use. The shipment should still have the same security measures applied even if the shipment is in a dedicated truck. While it might remove the risk of a misdirected package, it does not remove the possibility that the material could be stolen during transport. The licensee is allowed to transport its own category 1 or category 2 material under the rule.

Comment D29: One commenter was disappointed that the proposed rule did not contain the requirement for GPS tracking for trucks carrying category 2 quantities of radioactive material that was requested in PRM-71-13 or, alternatively, for the rule to give Agreement States the flexibility to be more stringent than NRC. The commenter was disappointed that the NRC did not request comments on the issues raised in the petition nor provided ~~any~~ further discussion or explanation for not including the two recommendations in the proposed rule. The commenter noted that NMED data shows that since the letter was sent, another truck carrying radiography sources was stolen, and the commenter further noted that it only takes one to become the terrorist event. The commenter noted that GPS tracking is very inexpensive and an easy way to

**AFFIRMATION ITEM**

**SUPPLEMENT - RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** Commissioner Apostolakis  
**SUBJECT:** SECY-11-0170- FINAL RULE: PHYSICAL PROTECTION OF BYPRODUCT MATERIAL (3150-AI12)

Approved  X  Disapproved   Abstain

Not Participating

**COMMENTS:** Below  X  Attached   None

I am supplementing my January 19, 2012 vote to recommend that staff use a self-protecting standard radiation dose that is consistent with IAEA standard for physical protection of nuclear material – INFCIRC/225/Rev. 4. Therefore, the criteria of 1 Gray (100 rad) per hour at 1 meter (3.3 feet) should be used. Conforming changes to the Federal Register Notice will also be necessary.



\_\_\_\_\_  
SIGNATURE

2/15/12   
DATE

Entered on "STARS" Yes  ✓  No

**AFFIRMATION ITEM**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** Commissioner Apostolakis  
**SUBJECT:** SECY-11-0170- FINAL RULE: PHYSICAL PROTECTION OF BYPRODUCT MATERIAL (3150-AI12)

Approved  X  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:** Below  X  Attached \_\_\_ None \_\_\_

I approve the staff's recommendation to publish in the *Federal Register* the final amendments to Parts 30, 32, 33, 34, 35, 36, 37, 39, 51, and 73, subject to the following.

- I concur with staff's determination that the rule, if promulgated, will not have a significant impact on a substantial number of small entities.
- I approve staff approach to rescind the security orders in accordance with its implementation plan.
- I approve staff's recommendation to conduct a rulemaking to remove the SGI-M requirement for certain licensees.
- Page 365, add a new sentence between the current 1<sup>st</sup> and 2<sup>nd</sup> sentences in paragraph (g). The sentence should read "A written report is not required for notifications on suspicious activities required by paragraphs (c) and (d) of this section."

I appreciate the staff's effort to engage the Agreement States and other stakeholders to inform the development of this final rule.

  
\_\_\_\_\_  
SIGNATURE

1/19/12  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  x  No \_\_\_

**AFFIRMATION ITEM**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** COMMISSIONER MAGWOOD  
**SUBJECT:** SECY-11 - 0170- FINAL RULE: PHYSICAL PROTECTION OF BYPRODUCT MATERIAL (3150-AI12)

Approved  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:** Below  Attached \_\_\_\_\_ None \_\_\_\_\_

I approve publication in the *Federal Register* notice of the final rulemaking adding the new 10 CFR Part 37 and making conforming changes to Parts 20, 30, 32, 33, 34, 35, 36, 39, 51, 71, and 73. I believe this rulemaking will contribute to stable, consistent regulation by codifying generically applicable regulatory requirements.

I commend the staff for engaging stakeholders early in the process involvement and for seeking extensive meaningful public involvement in the rulemaking process. I believe the agency has exemplified an open and transparent regulatory development process by conducting public meetings, issuing draft rule language for comment, requesting stakeholder feedback on specific contentious areas, and extending the public comment period for 75 to 120 days. The process applied here improved the final rule, greatly enhanced stakeholder buy-in, and should be a model for similar such rulemakings in the future.

  
\_\_\_\_\_  
**SIGNATURE**

22 February 2012  
\_\_\_\_\_  
**DATE**

Entered on "STARS" Yes  No \_\_\_\_\_



could diminish their focus on ensuring security compliance for existing category 1 and category 2 sources. One commenter noted that the rule would be burdensome on the regulatory agency and LLEAs, as well as licensees.

One commenter suggested placing generic requirements in the rule and then address subsets of licensees in the NUREG-1556 series. One commenter suggested that the proposed rule should be renoticed after making changes with more detail provided as to the actual safety and security benefits to be obtained. One commenter noted that the rule does not conform to the recent draft policy statement on the Protection of Cs-137 Chloride sources

*while continuing to ensure the adequate SAFETY and security of sources of concern.*

Response: The NRC understands the concerns of the commenters and has tried to limit the burden. The security orders were issued based on the specific knowledge and information available to the Commission at the time the orders were issued. The NRC never intended to simply make generically applicable security requirements identical to the orders. The NRC always intended to consider insights gained from the implementation of the orders and implementation of the inspection program, as well as other factors. A number of changes have been made based on specific public comment. The result of these rule changes significantly reduces the burden of the final rule as compared to the proposed rule. The NRC believes that the provisions in the final rule are necessary to protect the public health and safety and ensure security. There could be some facilities impacted by the rule that were not impacted by the orders. Some facilities, such as reactors and fuel facilities, may be impacted by part 37. There should not be any byproduct material facilities newly impacted by part 37 that were not impacted by the orders.

Comment A49: A couple of commenters stated that the NRC should only include the order provisions in the rule and then start work on developing a strategic rulemaking, which may need to include changes in legislative authority, to develop a part 37 with a more risk-informed

training, before actually having unescorted access. There are often individuals at facilities that have unescorted access permission but seldom exercise the permission. The language has been revised slightly to note that the reviewing official <sup>most</sup> ~~should~~ be permitted unescorted access X instead of being required to have unescorted access, and the phrase "as part of their job duties" has been removed. The changes were made to better match the language in the AEA. The compatibility of § 37.23(b)(3) was changed to Category C to allow States to be more restrictive as it relates to access to the material. Some States may have authority to require fingerprinting by use of other mechanisms than the AEA.

Comment B16: Several commenters suggested allowing a reviewing official approve others to be a reviewing official as this would provide the licensee with more flexibility in assigning individual duties. Commenters noted that the restriction seemed arbitrary. One of the commenters noted that there was no reason why a reviewing official couldn't approve someone as there is no difference in the determination for a reviewing official and someone for unescorted access. Commenters noted that if this requirement was an attempt to maintain a list of reviewing officials it could be accomplished in a different manner.

Response: The NRC does not believe that the reviewing official should be allowed to approve another individual to be a reviewing official. While the background investigation is identical, the responsibility for the reviewing official is greater. However, under the final rule, a licensee is able to name its own reviewing officials. The existing reviewing official could be involved in the background investigation evaluation. *See also* response to comment B14.

Comment B17: One commenter suggested adding the word "nominated" before reviewing official in § 37.23(b)(5) because the person is not a reviewing official until approved by the NRC.

Comment D28: One commenter suggested adding an exemption to § 37.79 for shipments transported as Exclusive Use, in accordance with 49 CFR 173.441. The commenter noted that package tracking systems are necessary when a carrier handles multiple consignments on single vehicles and when packages traverse through delivery hubs. The commenter noted that an exclusive use shipment removes the risk of lost or misdirected packages and would provide the same level of control as a package tracking system. The commenter noted that adding the exemption would give the licensee the ability to transport their own category 1 materials.

Response: The NRC disagrees with the comment and does not believe that an exemption is appropriate for shipments transported as Exclusive Use. The shipment should still have the same security measures applied even if the shipment is in a dedicated truck. While it might remove the risk of a misdirected package, it does not remove the possibility that the material could be stolen during transport. The licensee is allowed to transport its own category 1 or category 2 material under the rule.

Comment D29: One commenter was disappointed that the proposed rule did not contain the requirement for GPS tracking for trucks carrying category 2 quantities of radioactive material that was requested in PRM-71-13 or, alternatively, for the rule to give Agreement States the flexibility to be more stringent than NRC. The commenter was disappointed that the NRC did not request comments on the issues raised in the petition nor provided <sup>any</sup> ~~no~~ further discussion or explanation for not including the two recommendations in the proposed rule. The commenter noted that NMED data shows that since the letter was sent, another truck carrying radiography sources was stolen, and the commenter further noted that it only takes one to become the terrorist event. The commenter noted that GPS tracking is very inexpensive and an easy way to

X