

D. PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIAL OF LOW STRATEGIC SIGNIFICANCE

D-1. Each licensee who possesses, uses, transports, or delivers to a carrier for transport special nuclear material of moderate strategic significance, or 10 kg or more of special nuclear material of low strategic significance shall:

Submit a security plan or an amended security plan describing how the licensee will comply with all the requirements of 10 CFR 73.67(f), and (g), including schedules of implementation. The licensee shall retain a copy of the effective security plan as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the original plan was submitted. Copies of superseded material must be retained for three years after each change. 10 CFR 73.67(c)(1)

Within 30 days after the plan submitted pursuant to paragraph (c)(1) of this section (10 CFR 73.67), is approved or when specified by the NRC in writing, implement the approved security plan. 10 CFR 73.67(c)(2)

D-2. 10 CFR 73.67(f) and (g), pertain specifically to licensee fixed site and in-transit requirements for the physical protection of special nuclear material of low strategic significance.

D-3. Licensees who possesses, uses, transports, or delivers to a carrier for transport special nuclear material of less than 10 kg or more of special nuclear material of low strategic significance are exempt from the requirement of submitting a security plan as required by 10 CFR 73.67(c)(1). However they are required to protect the special nuclear material of low strategic significance in accordance with 10 CFR 73.67.

D-4. Part D of this regulatory guide will be formatted in a manner that duplicates the format of a physical security plan that is acceptable to NRC staff for facilities that use, possess, or transport special nuclear material of low strategic significance. It will have a section number and a name designation. It will be followed by an explanation of the information to be included within that section. It may also include references to 10 CFR part 73, or other documents that pertain to that section.

D-5. Table of Contents: Table 3 is an example of the recommended table of contents. Additional sections can be added as needed, utilizing the existing numbering scheme. All listed sections should be included in the submitted PSP. Sections that do not apply to a licensee's facility should be annotated "not applicable" with a short explanation as to why it doesn't apply. By annotating that unneeded sections do not apply, the reviewer/reader can readily see that the information within that section was not unintentionally omitted. (Example: Export requirements. Not Applicable - licensee does not export SNM)

Table 3.

TABLE OF CONTENTS		PAGE
1.0	Site and Facility Description	1
1.1	Owner Controlled Areas (OCAs)	1
1.2	Protected Areas (PAs)	1
1.2.1	Physical Barriers	1
1.2.2	Points of Ingress and Egress	2
1.2.3	Illumination	2
1.2.4	Monitoring	2
1.3	Material Access Areas (MAAs)	2
1.3.1	Physical Barriers	2
1.3.2	Points of Ingress and Egress	2
1.3.3	Illumination	2
1.3.4	Monitoring	2
1.4	Vehicle Barrier System (VBS)	3
2.0	Material Use and Storage Areas (Controlled Access Areas)	3
2.1	Critical Target Areas	3
2.1.1	Physical Barriers	3
2.1.2	Points of Ingress and Egress	4
2.1.3	Illumination	4
2.1.4	CTA Monitoring	4
2.2	Permanent Controlled Access Area (CAA)	4
2.2.1	Physical Barriers	4
2.2.2	Points of Ingress and Egress	5
2.2.3	Illumination	5
2.2.4	Monitoring	5
2.3	Temporary Controlled Access Areas (CAA)	5
2.3.1	Physical Barriers	5
2.3.2	Points of Ingress and Egress	6
2.3.3	Illumination	6
2.3.4	Monitoring	6
3.0	Security Practices	6
3.1	Access Controls	6
3.1.1	Badge System	7
3.1.2	Lock system	7
3.1.3	Access Authorization	7
3.1.4	Escort/visitor Control	7
3.1.5	Vehicle Access	7
3.2	Vehicle/Package Searches	7
3.3	Communications	7
3.4	Early Detection of Theft by an External Adversary	8
3.4.1	Gross Theft of Enriched Uranium	8
3.4.2	Minor Theft of Enriched Uranium	8
3.5	Site Response Measures	10
3.5.1	Events	10
3.5.2	Responsibilities	10
3.5.3	Available LLEA	11
3.5.4	Police Response Force	11

4.0	Security Organization and Responsibilities	9
4.1	Management Organization	9
4.2	Facility Security Organization	9
5.0	SNM Transportation Requirements - Shipper	11
5.1	Advance Notification	12
5.2	Receiver Confirmation	12
5.3	Container/Tamper Seal Inspection	13
5.4	In-Transit Physical Protection	13
5.5	Response procedures	13
5.6	Receipt Notification	13
5.7	Lost Material Procedures/Notification	13
6.0	SNM Transportation Requirements - Receiver	14
6.1	Inspection	14
6.2	Notification	14
6.3	In-Transit Physical Protection	14
6.4	Response Procedures	14
6.5	Receipt Notification	14
6.6	Lost Material Procedures/Notification	14
7.0	Export Requirements	15
7.1	Advance Notification	15
7.2	Receiver confirmation	15
7.3	Containers/Taper seal Inspection	15
7.4	In-Transit Physical Protection	15
7.5	Response Procedures	15
7.6	Receipt Notification	15
7.7	Lost Material Procedures/Notification	16
8.0	Import Requirements	16
8.1	Inspection	16
8.2	Notification	16
8.3	In-transit Physical Protection	16
8.4	Response Procedures	17
8.5	Lost Material Procedures/Notification	17
9.0	Recordkeeping Requirements	18
9.1	Security Plan	18
9.2	Response Procedures	18
9.3	Export Shipment Records	18
9.4	Import Shipment Records	18
9.5	Other Records	18

FIGURES (as needed)

Figure 1-1	Title	x
Figure 1.2	Title	x
Figure 3-1	Title	x

TABLES (as needed)

Table 1	CATEGORIES OF SPECIAL NUCLEAR MATERIAL	5
Table 2	Title	x
Table 3	TABLE OF CONTENTS	33
Table 4	Title	x

1.0 Site and Facility Description

This section provides background information on the site. Provide the name and address of the facility, the license number, docket number, and license expiration date. Verbally describe the facility, where it is located, who or what is located along the borders, what the facility does, distance from populated areas, what the area immediately adjacent to the facility is used for. Site sketches and overhead photos can be included.

1.1 Owner Controlled Area (OCA). If the facility has an OCA, describe how the perimeter is constructed, what is located on the area, how it is monitored, and access controls for personnel and vehicles. Site diagrams and overhead photographs can be used to assist in describing the OCA.

1.2 Protected Area (PA). Category III facilities are not required to utilize a PA. However, if the facility has a PA, describe how the perimeter is constructed, monitored, and access controls for personnel and vehicles. Describe the number, location and type of ingress and egress points from the PA. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.* (If more than one PA exists, list and describe each one separately)

1.2.1 Physical Barriers - Describe the physical barriers used to form the PA perimeter. Diagrams can be used to provide additional information and clarification.

"Physical barrier" means: (1) Fences constructed of no. 11 American wire gauge, or heavier wire fabric, topped by three strands or more of barbed wire or similar material on brackets angled inward or outward between 30 and 45 degrees from the vertical, with an overall height of not less than eight feet, including the barbed topping; (2) building walls, ceilings, and floors constructed of stone, brick, cinder block, concrete, steel, or comparable materials (openings in which are secured by grates, doors, or covers of construction and fastenings of sufficient strength such that the integrity of the wall is not lessened by any opening), or walls of similar construction, not part of a building, provided with a barbed topping as described in paragraph (1) of this definition of a height of not less than 8 feet; or (3) Any other physical obstruction constructed in a manner and of materials suitable for the purpose for which the obstruction is intended. *Barriers should be permanent or semi permanent fixtures. Semi permanent implies that they are not easily moved or bypassed but that they can be moved if disassembled or with the use of moving equipment.* (10 CFR 73.2)

1.2.2 Points of Ingress and Egress - Describe the number, location and type of ingress and egress points in the PA. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.*

1.2.3 Illumination - Describe the illumination in the storage and usage area. Illumination must be sufficient to allow CCTV cameras to function properly and for security personnel to be able to monitor and perform assessment functions as needed. Light sources should be positioned to provide overlap so that in the event of a loss of a source of light, remaining sources can provide enough illumination to allow for proper monitoring and assessment of the area until repairs are completed. For those facilities where experiments must be conducted in a darkened room, the lighting requirement is exempted for as long as is needed

provided access control is ensured and the material is accounted for at the completion of the experiment.

1.2.4 Monitoring - Describe in detail how the PA is monitored. If guarded, identify the number of guards, location, communication capabilities, armament, and response force capabilities (location and response time to include LLEA), If CCTV is used, describe the system in detail, include monitoring locations, distance to CAS or SAS, type of transmission (wired, wireless, IP, digital/analog etc) recording capability, if equipped with Pan-Tilt-Zoom (PTZ), and motion sensing.

1.3 Material Access Area (MAA) If the facility has a MAA, describe how the perimeter is constructed, monitored, and access controls for personnel and vehicles. Describe the number, location and type of ingress and egress points from the MAA. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.* (If more than one MAA exists, list and describe each one separately)

1.3.1 Physical Barriers - Describe the physical barriers used to form the MAA perimeter. Diagrams can be used to provide additional information and clarification.

"Physical barrier" means: (1) Fences constructed of no. 11 American wire gauge, or heavier wire fabric, topped by three strands or more of barbed wire or similar material on brackets angled inward or outward between 30 and 45 degrees from the vertical, with an overall height of not less than eight feet, including the barbed topping; (2) building walls, ceilings, and floors constructed of stone, brick, cinder block, concrete, steel, or comparable materials (openings in which are secured by grates, doors, or covers of construction and fastenings of sufficient strength such that the integrity of the wall is not lessened by any opening), or walls of similar construction, not part of a building, provided with a barbed topping as described in paragraph (1) of this definition of a height of not less than 8 feet; or (3) Any other physical obstruction constructed in a manner and of materials suitable for the purpose for which the obstruction is intended. *Barriers should be permanent or semi permanent fixtures. Semi permanent implies that they are not easily moved or bypassed but that they can be moved if disassembled or with the use of moving equipment.* (10 CFR 73.2)

1.3.2 Points of Ingress and Egress - Describe the number, location and type of ingress and egress points in the MAA. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.*

1.3.3 Illumination - Describe the illumination in the storage and usage area. Illumination must be sufficient to allow CCTV cameras to function properly and for security personnel to be able to monitor and perform assessment functions as needed. Light sources should be positioned to provide overlap so that in the event of a loss of a source of light, remaining sources can provide enough illumination to allow for proper monitoring and assessment of the area until repairs are completed. For those facilities where experiments must be conducted in a darkened room, the lighting requirement is exempted for as long as is needed provided access control is ensured and the material is accounted for at the completion of the experiment.

1.3.4 Monitoring - Describe in detail how the MAA is monitored. If guarded, identify the number of guards, location, communication capabilities, armament, and response

force capabilities (location and response time to include LLEA), If CCTV is used, describe the system in detail, include monitoring locations, distance to CAS or SAS, type of transmission (wired, wireless, IP, digital/analog etc) recording capability, if equipped with Pan-Tilt-Zoom (PTZ), and motion sensing.

1.4 Vehicle Barrier System (VBS). If the facility utilizes a VBS, describe how the VBS is configured including the parameters of any Interim Compensatory Measures (ICMs) or regulatory guidance that may apply. Include diagrams or overhead photos to assist in describing the system layout. List separately if more than one VBS exists.

2.0 Material Use and Storage Areas (Critical Target Areas and Controlled Access Areas)

2.1 Critical Target Areas (CTAs) are designated by meeting the parameters set forth in the following ICMs:

ICM at Gaseous Diffusion Plants, dated, June 17, 2002.

ICM for Category -3 Fuel Cycle Facilities, dated, February 6, 2003.

2.1.1 Physical Barriers - Describe the physical barriers used to form the CTA perimeter. Diagrams can be used to provide additional information and clarification.

"Physical barrier" means: (1) Fences constructed of no. 11 American wire gauge, or heavier wire fabric, topped by three strands or more of barbed wire or similar material on brackets angled inward or outward between 30 and 45 degrees from the vertical, with an overall height of not less than eight feet, including the barbed topping; (2) building walls, ceilings, and floors constructed of stone, brick, cinder block, concrete, steel, or comparable materials (openings in which are secured by grates, doors, or covers of construction and fastenings of sufficient strength such that the integrity of the wall is not lessened by any opening), or walls of similar construction, not part of a building, provided with a barbed topping as described in paragraph (1) of this definition of a height of not less than 8 feet; or (3) Any other physical obstruction constructed in a manner and of materials suitable for the purpose for which the obstruction is intended. *Barriers should be permanent or semi permanent fixtures. Semi permanent implies that they are not easily moved or bypassed but that they can be moved if disassembled or with the use of moving equipment.* (10 CFR 73.2)

2.1.2 Points of Ingress and Egress - Describe the number, location and type of ingress and egress points from the location where SNM is used and stored. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.*

2.1.3 Illumination - Describe the illumination in the storage and usage area. Illumination must be sufficient to allow CCTV cameras to function properly and for security personnel to be able to monitor and perform assessment functions as needed. Light sources should be positioned to provide overlap so that in the event of a loss of a source of light, remaining sources can provide enough illumination to allow for proper monitoring and assessment of the area until repairs are completed. For those facilities where experiments must be conducted in a darkened room, the lighting requirement is exempted for as long as is needed provided access control is ensured and the material is accounted for at the completion of the experiment.

2.1.4. CTA Monitoring - Describe in detail how the CTA is monitored. If guarded, identify the number of guards, location, communication capabilities, armament, and response force capabilities (location and response time to include LLEA), If CCTV is used, describe the system in detail, include monitoring locations, distance to CAS or SAS, type of transmission (wired, wireless, IP, digital/analog etc) recording capability, if equipped with Pan-Tilt-Zoom (PTZ), and motion sensing.

2.2 Controlled Access Area (CAA) - Permanent.

List and describe each permanent CAA separately, providing the information requested in paragraphs 2.2.1. thru 2.1.4. below. If multiple CAAs are utilized, continue the numbering sequence starting with 2.1.5. Provide building number(s), room numbers, adjoining areas/facilities, Describe if it is a storage or use area, or both. Provide a description of the area and its features relative to other facility features, and the types of materials used or stored in each CAA. Diagrams can be used to supplement the description of the CAA and surrounding areas.

A "CAA" is defined as any temporary or permanently established area which is clearly demarcated, access to which is controlled, and which affords isolation of the material or persons within it. "Access control" means measures used to allow only specified personnel, materials, and vehicles ingress into and egress from a given area, while "isolation" refers to measures taken to deter persons, materials, or vehicles from entering or leaving a given area through other than established access control points. In some cases, isolation or access control systems may also serve the purpose of aiding in the detection of unauthorized penetration or activities within the CAA. "Unauthorized activities" are those activities deemed by the licensee to be indicative of or contributory to the possible theft of SNM or other terroristic acts. 10 CFR 73.2

"Fixed site requirements for special nuclear material of moderate strategic significance." Requires that licensees use the material only within a controlled access area which is illuminated sufficiently to allow detection and surveillance of unauthorized penetration(s) or activities. 10 CFR 73.67(d)(1)

Store the material only within a CAA such as a vault type room or approved security cabinet or their equivalent which is illuminated sufficiently to allow detection and surveillance of unauthorized penetrations or activities. 10 CFR 73.67(d)(2).

2.2.1 Physical Barriers - Describe the physical barriers used to form the CAA perimeter. Diagrams can be used to provide additional information and clarification.

Permanently established CAAs for the use and temporary storage of SNM of low strategic significance should provide isolation for the SNM through use of permanent barriers. These could consist of fences, gates, or freestanding walls for the exterior areas; or exterior or interior building walls, locked doors, windows, bars, grillwork; or other barriers for the interior areas. Such barriers are not required to meet the more stringent criteria for physical barriers used for the protection of formula quantities of strategic special nuclear material (SSNM) However, good security management practice would dictate that the barrier be substantial enough to deter casual passersby from unauthorized penetration. If the barriers are also designed to aid in detection, the criteria for penetration resistance or tamper indication is accordance with the specific monitoring procedures to be used also apply.

These may be temporarily established to meet transitory or intermittent SNM use requirements or they may be permanently established. Permanently established CAAs for use of SNM may also be suitable for storage provided they meet the storage requirements. "Use" means that the material is undergoing processing or utilization of its properties in conjunction with experimental equipment such as that used for research or educational laboratory experiments. Different isolation/access control measures may be used for periods during which the area is occupied versus unoccupied. When different isolation and access control measures are used the measures should be fully described to clearly show when, how, and why they are used.

An approved security cabinet that meets the requirements of 10 CFR 73.67(d)(2) meets or exceeds the GSA class 6 rating. An equivalent to an approved security cabinet is based on the penetration resistance of the container and the difficulty associated with manipulating the lock. The basic premise used to determine whether such a container may be monitored by procedures or devices other than a motion detector is whether it is unreasonable to expect that an external adversary could penetrate the container in a reasonable amount of time without leaving an indication of the penetration. The amount of time that would be required for penetration without such an indication may be used to govern the frequency of patrols when monitoring procedures are used. An approved security cabinet or is equivalent is one whose design has been certified by the General Services Administration (GSA) or other nationally recognized standards organization (ANSI) to afford protection against surreptitious entry and lock manipulation equivalent to that provided by a class 6 GSA or better rated container.

Examples of CAAs where SNM of low strategic significance may be stored are:

Vault. A structure that satisfies the definition for a vault as stated in 10 CFR 73.2.

Vault type room. Some typical vault type rooms where SNM is stored and protected with an Intrusion Detection System or motion sensing video cameras and adequately illuminated are storage pools, a room containing in-process storage racks, and laboratories where material is left unattended. In all cases, movement near the vicinity of the material of the material itself generates an alarm signal.

Approved Security Cabinets. Those cabinets that meet or exceed the parameters listed in the preceding paragraph.

Reactor. Reactors that are so designed that removal of material is difficult.

Locked Laboratories and Supply Rooms. These areas must be sufficiently penetration resistant to afford a means of isolation/access control and permit the proper functioning of the system for monitoring the storage area as required by 10 CFR 73.67(d)(3).

2.2.2 Points of Ingress and Egress - Describe the number, location and type of ingress and egress points from the location where SNM is used and stored. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.*

2.2.3 Illumination - While not specifically required for CAT III facilities, CAAs should be adequately illuminated so that security personnel can adequately monitor the CAA for unauthorized activity. Describe the illumination in the storage and usage area. Illumination must be sufficient to allow CCTV cameras to function properly and for security personnel to be able to monitor and perform assessment functions as needed. Light sources should be positioned to provide overlap so that in the event of a loss of a source of light, remaining sources can provide enough illumination to allow for proper monitoring and assessment of the area until repairs are completed. Illumination can include Infra-Red (IR) sources for use with CCTV systems. Sufficient IR sources must be used to provide adequate illumination for the cameras to work properly. For those facilities where experiments must be conducted in a darkened room, the lighting requirement is exempted for as long as is needed provided access control is ensured and the material is accounted for at the completion of the experiment.

2.2.4 Monitoring - *Monitor with an intrusion alarm (intrusion detection system) or other device (motion sensing video camera) or procedure the controlled access areas to detect unauthorized penetrations or activities. 10 CFR 73.67(f)(2)*

For each of the CAAs designated for the protection of SNM of moderate strategic significance, provide the following information regarding the measures taken to fulfill the monitoring requirement of paragraph 73.67(f)(2):

1. Describe any devices employed by specifying the type of device, its installed location, the type and location of annunciation, the intended area of coverage, and the tamper-resistant features. Additional information on Intrusion Detection systems can be found in Regulatory Guide 5.44.
2. Describe any procedures employed to monitor the CAA or portions thereof, including the categories of persons who will execute the procedures, the frequency of inspections or rounds of patrol, the basis for the determination of such frequencies, and the occasions when the procedures are intended to be implemented. Also indicate the features of the CAA (e.g., barriers, locks, seals) that will affect the way the procedures are used.
3. Explain how the combination of procedures and devices used to monitor each CAA meets the criteria for early detection of theft by an external adversary relative to the type of material found in each CAA.

2.3 Controlled Access Area -Temporarily Established.

Indicate under what conditions CAAs will be established on a temporary basis. List and describe each temporary CAA separately providing the information requested in paragraphs 2.3.1. thru 2.3.4 below. If multiple temporary CAAs are utilized, initiate the numbering sequence starting with 2.3.5. Provide building number(s), room numbers, adjoining areas/facilities, Describe if it is a storage or use area, or both. Provide a description of the area and its features relative to other facility features, and the types of materials used or stored in each CAA. Diagrams can be used to supplement the description of the CAA and surrounding areas.

Temporarily established CAAs for the use of SNM need not have permanent barriers at their boundaries. Isolation of the material and persons using the material may be provided by office partitions, cordons, or other devices used to warn passersby of the restricted nature of the area. Access control can be effected through surveillance or supervision of the area by those who are using the SNM and who are responsible for the material. However, the provisions of access

control through personal supervision is suitable only for those situations in which the size of the CAA and the number of persons to be admitted are sufficiently small and in which the CAA is suitably configured to make such procedures practical. The ratio of supervisory personnel to users should not exceed 1 to 4 provided the users remain in constant view of the supervisor. Being separated by office furnishings, laboratory/test equipment that can block the view of the supervisor or working in an area that consists of several rooms which can cause a separation of the users from the supervisor(s) does not constitute adequate surveillance. The material must be physically accounted for at the end of the period of use.

2.3.1 Physical Barriers - Describe the physical barriers used to form the temporary CAA perimeter. Diagrams can be used to provide additional information and clarification.

Permanently established CAAs for the use and temporary storage of SNM of low strategic significance should provide isolation for the SNM through use of permanent barriers. These could consist of fences, gates, or freestanding walls for the exterior areas; or exterior or interior building walls, locked doors, windows, bars, grillwork; or other barriers for the interior areas. Such barriers are not required to meet the more stringent criteria for physical barriers used for the protection of formula quantities of strategic special nuclear material (SSNM). However, good security management practice would dictate that the barrier be substantial enough to deter casual passersby from unauthorized penetration. If the barriers are also designed to aid in detection, the criteria for penetration resistance or tamper indication in accordance with the specific monitoring procedures to be used also apply.

These may be temporarily established to meet transitory or intermittent SNM use requirements or they may be permanently established. Permanently established CAAs for use of SNM may also be suitable for storage provided they meet the storage requirements. "Use" means that the material is undergoing processing or utilization of its properties in conjunction with experimental equipment such as that used for research or educational laboratory experiments. Different isolation/access control measures may be used for periods during which the area is occupied versus unoccupied. When different isolation and access control measures are used the measures should be fully described to clearly show when, how, and why they are used.

An approved security cabinet that meets the requirements of 10 CFR 73.67(d)(2) meets or exceeds the GSA class 6 rating. An equivalent to an approved security cabinet is based on the penetration resistance of the container and the difficulty associated with manipulating the lock. The basic premise used to determine whether such a container may be monitored by procedures or devices other than a motion detector is whether it is unreasonable to expect that an external adversary could penetrate the container in a reasonable amount of time without leaving an indication of the penetration. The amount of time that would be required for penetration without such an indication may be used to govern the frequency of patrols when monitoring procedures are used. An approved security cabinet or its equivalent is one whose design has been certified by the General Services Administration (GSA) or other nationally recognized standards organization (ANSI) to afford protection against surreptitious entry and lock manipulation equivalent to that provided by a class 6 GSA or better rated container.

Examples of CAAs where SNM of low strategic significance may be stored are:

Vault. A structure that satisfies the definition for a vault as stated in 10 CFR 73.2.

Vault type room. Some typical vault type rooms where SNM is stored and protected with

an Intrusion Detection System or motion sensing video cameras and adequately illuminated are storage pools, a room containing in-process storage racks, and laboratories where material is left unattended. In all cases, movement near the vicinity of the material of the material itself generates an alarm signal.

Approved Security Cabinets. Those cabinets that meet or exceed the parameters listed in the preceding paragraph.

Reactor. Reactors that are so designed that removal of material is difficult.

Locked Laboratories and Supply Rooms. These areas must be sufficiently penetration resistant to afford a means of isolation/access control and permit the proper functioning of the system for monitoring the storage area as required by *10 CFR 73.67(d)(3)*.

2.3.2 Points of Ingress and Egress - Describe the number, location and type of ingress and egress points from the location where SNM is used and stored. Describe how they are controlled (manned/unmanned and *describe the types of access control devices in use, i.e. turnstiles, card readers, or manually released door controls, etc.*

2.3.3 Illumination - While not specifically required for CAT III facilities, CAAs should be adequately illuminated so that security personnel can adequately monitor the CAA for unauthorized activity. Describe the illumination in the storage and usage area. Illumination must be sufficient to allow CCTV cameras to function properly and for security personnel to be able to monitor and perform assessment functions as needed. Light sources should be positioned to provide overlap so that in the event of a loss of a source of light, remaining sources can provide enough illumination to allow for proper monitoring and assessment of the area until repairs are completed. Illumination can include Infra-Red (IR) sources for use with CCTV systems. Sufficient IR sources must be used to provide adequate illumination for the cameras to work properly. For those facilities where experiments must be conducted in a darkened room, the lighting requirement is exempted for as long as is needed provided access control is ensured and the material is accounted for at the completion of the experiment.

2.3.4 Monitoring - *Monitor with an intrusion alarm (intrusion detection system) or other device (motion sensing video camera) or procedure the controlled access areas to detect unauthorized penetrations or activities. 10 CFR 73.67(f)(2)*

For each of the Temporary CAAs designated for the protection of SNM of moderate strategic significance, provide the following information regarding the measures taken to fulfill the monitoring requirement of paragraph 73.67(f)(2):

1. Describe any devices employed by specifying the type of device, its installed location, the type and location of annunciation, the intended area of coverage, and the tamper-resistant features. Additional information on Intrusion Detection systems can be found in Regulatory Guide 5.44.
2. Describe any procedures employed to monitor the CAA or portions thereof, including the categories of persons who will execute the procedures, the frequency of inspections or rounds of patrol, the basis for the determination of such frequencies, and the

occasions when the procedures are intended to be implemented. Also indicate the features of the CAA (e.g., barriers, locks, seals) that will affect the way the procedures are used.

3. Explain how the combination of procedures and devices used to monitor each CAA meets the criteria for early detection of theft by an external adversary relative to the type of material found in each CAA.

3.0 Security Practices. Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance. 10 CFR 73.67

General performance objectives.

(1) Each licensee who possesses, uses, or transports special nuclear material of moderate or low strategic significance shall establish and maintain a physical protection system that will achieve the following objectives:

(i) Minimize the possibilities for unauthorized removal of special nuclear material consistent with the potential consequences of such actions; and

(ii) Facilitate the location and recovery of missing special nuclear material.

(2) To achieve these objectives, the physical protection system shall provide:

(i) Early detection and assessment of unauthorized access or activities by an external adversary within the controlled access area containing special nuclear material;

(ii) Early detection of removal of special nuclear material by an external adversary from a controlled access area;

(iii) Assure proper placement and transfer of custody of special nuclear material; and

(iv) Respond to indications of an unauthorized removal of special nuclear material and then notify the appropriate response forces of its removal in order to facilitate its recovery.

The following sections address security measures that have the intent of meeting the requirements listed section 3.0, above. While they may not be addressed within 10 CFR 73.67 for SNM of low strategic significance or specifically required as they are for SNM of moderate strategic significance, they are included within this section and are recommended by the NRC staff to be included in the facility physical protection system, whenever possible.

3.1 Access Controls (*Access controls are defined as measures used to allow only specified personnel, materials, and vehicles ingress and egress from a given area*) If the access controls are the same for all PAs, MAAs, CTAs, and permanent and temporary CAAs the measures need only be stated once and caveated that they apply to all areas. If any of the areas have differing access controls the differences must be annotated and linked to the specific area to which they apply.

3.1.1 Badge System. *Develop and maintain a controlled badging and lock system to identify and limit access to the controlled access areas to authorized individuals. 10 CFR 73.67(a)(2)(i).*

The purpose of the badging system is to facilitate the identification of authorized individuals and the control of access to or within the PA, MAA, and CAA where the material is used or stored. Information on the badge should be such that it is possible to clearly distinguish personnel authorized for access to the CAAs from those requiring an escort. Information on the badge should also uniquely identify the individual possessing the badge. This personalized information can be obtained through the use of photographs, personal vital statistics, signatures, or any means the licensee may wish to use that will uniquely identify the Individual.

Describe the badging system used to facilitate control of access to the applicable MAAs, Pas and CAAs. This description should include:

1. The size, shape, color, material, and construction of badges.
2. The distinguishing features of the badge that identify authorized individuals from escorted individuals.
3. How the badges will be used for controlling access. (For example, will all individuals be checked prior to entering the areas, will periodic " checks be made of individuals within a CAA to determine if they are authorized or under escort, or will the badge itself permit authorized entrance, e.g., a card key'.)
4. The system used for issuing, controlling, and accounting for the badges.

3.1.2 Locking System. *Develop and maintain a controlled badging and lock system to identify and limit access to the controlled access areas to authorized individuals. 10 CFR 73.67(a)(2)(i).*

Locks used to control access to CAAs should be resistant to manipulation or picking and should not be mastered. Examples of typical lock systems that fit this description are three-position dial-type combination locks, six-pin key locks, and card-key lock systems. The procedures for assigning keys and combinations to individuals is an integral part of the lock system and should be designed to ensure that only authorized personnel have access to such items. Locks and combinations should be changed when information is obtained that the lock system may have been compromised. Further information may be obtained in Regulatory Guide 5.12, "General Use of Locks in the Protection and Control of Facilities and Special Nuclear Materials."

Describe the locking system used to control access to the CAAs where material is used and stored. This description should include locations of all locks included in the system by type of lock, the pick-resistant and manipulation-resistant characteristics of each lock type used, personnel responsible for issuing keys or combinations and changing combinations or locks, criteria for changing combinations or locks, personnel authorized to be given keys or combinations, and descriptions of types of locks used.

3.1.3 Access Authorization. *Conduct screening prior to granting an individual unescorted access to the controlled access area where the material is used or stored, in order to obtain information on which to base a decision to permit such access. 10 CFR 73.67(a)(2)(i).*

The Intent of the requirement for preauthorization screening is to ensure that the licensee will have sufficient knowledge of an individual to determine his/her reliability and need for access prior to granting him/her authorized access to the CAA where the material is used or stored. The selection of procedures for conducting this examination and the criteria employed to make these judgments are the responsibility of the licensee and, of course, should be consistent with all local, State, and Federal laws and regulations regarding the protection of the privacy and other rights of the individual. The screening process may be conducted in the same manner as other investigations customarily conducted by potential employers for similarly sensitive positions. There is no requirement for the licensee to arrange for an NRC clearance or similar clearance from any other government organization. Examples of procedures and criteria that may be employed in the screening process include holding or having recently held a government-sanctioned clearance; examination of past employment or educational records (to determine any unsatisfactory employment or school actions or incidents that would indicate any unreliability or previous breaches of trust between the individual and his/her employer); endorsements or references from previous employers, teachers, or colleagues that would support a decision for granting access or that would attest to the trustworthiness and reliability of the individual; and consideration of the individual's present employment record indicating demonstrated trustworthiness and reliability over an extended period of employment with the licensee. (This may be considered in the nature of "grandfathering.")

Describe the procedures and criteria that will be used for obtaining sufficient information prior to making a decision on granting unescorted access authorization to an individual to CAAs where the material is used or stored. Identify the types of individuals who will be screened (e.g., process engineers, supervisory personnel, professors, instructors, graduate students) and who will perform the screening process.

3.1.4 Escort/visitor procedures. Limit access to the controlled access areas to authorized or escorted individuals who require such access in order to perform their duties. 10 CFR 73.67(d)(6) Assure that all visitors to the controlled access areas are under the constant escort of an individual who has been authorized access to the area. 10 CFR 73.67(a)(2)(i).

Describe the system that will be used to escort individuals in the applicable controlled areas. In its security plan, the licensee should ensure that only properly authorized individuals will be allowed to escort individuals. This description should include:

1. Criteria to be used for granting escorted access.
2. Criteria to be used for escorting others.
3. Procedures for escorting individuals into PAs, MAAs, and CAAs (e.g., students under the supervision of laboratory instructor, public tours).
4. The number of escorted Individuals per escort, and
5. The responsibilities of the escort (e.g., periodic surveillance of all individuals under escort, accounting for all material prior to leaving the PAs, MAAs, and CAA, remaining in general area during the time unauthorized individuals are present)..

The requirement that an escort system be established is in recognition of the fact that the licensee may wish to allow access to certain persons or classes of persons on a temporary or

infrequent basis or on short notice, thus making the routine process for granting access authorizations impractical or inexpedient. Typical arrangements for escorted access may include escorts for maintenance or repair personnel, laboratory classes, public tours, guests, and visitors as required.

3.1.5 Vehicle Access. If vehicles are permitted access to a CAA, describe the types of vehicles, the purpose for the vehicles entry, and how they are controlled and monitored/escorted while in the CAA.

3.2 Searches The primary intent of the search requirement is to deter and possibly detect attempted thefts of SNM. The search procedures developed by the licensee should take into consideration the environs where the material is used or stored, the physical characteristics of the material itself, and the frequency of accounting for the material. In some cases, this will require that all vehicles and packages leaving the CAAs be searched in a random manner. The frequency of random searches should be determined by the ease with which the material can be stolen and the length of time it would take to detect a theft. In other cases, only packages that equal or exceed the size of the material being used or stored would have to be searched, taking into consideration the difficulty with which the material could be broken into smaller, more easily concealed parts. *10 CFR 73.67(a)(2)(i)*.

Content

Describe the system to be used for randomly searching vehicles or packages that leave the CAA. Include in the description information as to:

1. The scope of the search. This should identify the criteria that will be used for searching vehicles and packages (e.g., whether all packages and vehicles are subject to search or just those packages or vehicles that are larger than the smallest configuration of material being used or stored).
2. The randomness of the search. The scheme for selecting the packages or vehicles to be searched should be identified (e.g., subjecting each package or vehicle to a search, using a random number generator for determining whether a candidate package or vehicle is to be searched, searching a minimum percentage of all packages or vehicles leaving the CAA each day).

3.3 Communications. Provide a communication capability between the security organization and appropriate response force. *10 CFR 73.67(f)(3),(4)*

Ensure that a communication capability exists between the licensee and the designated response force. It is implied that, prior to setting up a communication capability, procedures and responsibilities will have been established between the response force and the licensee. The type of communication system chosen by a licensee should:

1. Provide for full duplex voice communication capability,
2. Be easily accessible to the licensee's security organization, and
3. Be reliable and available for immediate use at any time.

Some communication systems that would provide these capabilities include a dedicated telephone system, a non-dedicated public telephone system, radio, or any combination thereof.

Describe the communication system that is used between the security organization and the appropriate response force. This description should include information on:

1. Type of communication system,
2. Location of voice terminals in relationship to CAAs,
3. Availability of communication system on a 24-hour basis, and
4. Reliability of communication system.

3.4 Early Detection of Theft by an External Adversary *Each licensee who possesses, uses, or transports special nuclear material of moderate or low strategic significance shall establish and maintain a physical protection system that will achieve the following objectives. 10 CFR 73.67(a)(1)*

Minimize the possibilities for unauthorized removal of special nuclear material consistent with the potential consequences of such actions. 10 CFR 73.67(a)(1)(i)

Early detection of removal of special nuclear material by an external adversary from a controlled access area. 10 CFR 73.67(a)(2)(ii).

3.4.1 Gross Theft of Moderately Enriched Uranium. After a review of the types, quantities, and locations of materials, and security measures in effect, describe the possible theft scenarios that would have to be undertaken by an internal or external adversary in order to accomplish a gross theft of moderately enriched uranium. Describe the amount and makeup of the material that would be the target of the theft.

Describe any procedures employed to monitor the CAA or portions thereof, including the categories of persons who will execute the procedures, the frequency of inspections or rounds of patrol, the basis for the determination of such frequencies, and the occasions when the procedures are intended to be implemented. Also indicate the features of the CAA (e.g., barriers, locks, seals) that will affect the way the procedures are used.

Explain how the combination of procedures and devices used to monitor each CAA meets the criteria for early detection of theft by an external adversary relative to the type of material found in each CAA.

3.4.2 Minor Theft of Moderately Enriched Uranium. After a review of the types, quantities, and locations of materials, and security measures in effect, describe the possible theft scenarios that would have to be undertaken by an internal or external adversary in order to accomplish a minor theft of moderately enriched uranium. Describe the amount and makeup of the material that would be the target of the theft.

Describe any procedures employed to monitor the CAA or portions thereof, including the categories of persons who will execute the procedures, the frequency of inspections or rounds of patrol, the basis for the determination of such frequencies, and the occasions when the procedures are intended to be implemented. Also indicate the features of the CAA (e.g., barriers, locks, seals) that will affect the way the procedures are used.

Explain how the combination of procedures and devices used to monitor each CAA meets the criteria for early detection of theft by an external adversary relative to the type of material found in each CAA.

3.5 Site Response Measures Respond to indications of an unauthorized removal of special nuclear material and then notify the appropriate response forces of its removal in order to facilitate its recovery. 10 CFR 73.67(a)(1)(iv)

The intent of this regulation is to help the licensee to identify those security incidents that could result in the loss of SNM of low strategic significance and to develop response procedures to prevent or reduce the likelihood of such a loss. Some types of incidents that should be considered and for which response procedures should be developed are:

1. Situations that could possibly lead to theft of SNM (e.g., civil strife, terrorist attack),
2. Discovery that the security system has been breached, and
3. Discovery that some SNM is missing.

3.5.1 Events. Identify those events for which response procedures will be developed.

3.5.2 Responsibilities. Identify the duties and responsibilities of the security organization and management involved in the response.

3.5.3 Available LEAA. List the categories and forces available, i.e. Category - Local, Force - could be one or more police forces from neighboring communities. Additional categories could include County and State Police.

3.5.4 Police Response Force. Describe how the responding LEAA will respond by number of personnel, estimated time of response, and any special capabilities, restrictions, or response plans in effect.

Event matrix charts can be utilized to capture the event-responsibilities, response, and reporting sequence for each event devised.

3.5.5 Notification. Ensure that the NRC will be notified immediately in the event of theft or attempted theft of the material. Identify the person(s) by name or duty position who is responsible for making the notifications.

4.0 Security Organization and Responsibilities.

4.1 Management Organization. Describe the position and responsibilities of each individual in the management organization. A table depicting a line and block chart may be used to show working relationships.

4.2 Plant Security Organization. Describe organization and responsibilities of each level or category of security personnel. Provide a line and block chart depicting the organizations chain of command and working relationships.

5.0 SNM Transportation Requirements - Shipper. In-transit requirements for special nuclear material of low strategic significance. 10 CFR 73.67(g)

Each licensee who transports, exports, or delivers to a carrier for transport special nuclear material of low strategic significance shall:

5.1 Advance Notification. The licensee shall ensure in his security plan that, prior to each shipment of material, the receiver will be notified of the impending shipment and provided the following types of information: 10 CFR 73.67(g)(1)(i)

1. Mode of transport (e.g., truck, plane, train, or ship),
2. Estimated time of arrival,
3. Location where custody of the material will be transferred to the receiver,
4. Name of carrier, and
5. Transport identification (e.g., truck, train, or flight number; ship name).

Describe the policies and or procedures used to facilitate the advance notification requirement.

5.2 Receiver Confirmation. Prior to shipment, the shipper will be assured that the receiver is ready to accept the shipment at the planned time and location and has acknowledged the specified mode of transport. 10 CFR 73.67(g)(1)(ii)

Describe what procedures will be used to ensure that shipment of material does not take place until the receiver acknowledges the planned shipment and mode of transport and states that he will be ready to accept the shipment at the planned time and location.

5.3 Container/Tamper Seal Inspection. Check the integrity of the containers and seals prior to shipping and ensure the shipment is packaged in a tamper indicating sealed container. 10 CFR 73.67(g)(1)(iii) and (iv)

Describe the process to be used to inspect the integrity of the container(s) and lock(s) or seal(s). Identify the individual(s) by duty position who will be responsible for the inspection.

5.4 In-Transit Physical Protection. Arrange for the in-transit physical protection of the material in accordance with the requirements of paragraph 73.67(g)(3) unless the receiver is a licensee and has agreed in writing to arrange for the in-transit physical protection. 10 CFR 73.67(g)(1)(v)

Describe the procedures to be used to satisfy the requirements listed in section 5.4 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

Each licensee, either shipper or receiver, who arranges for the physical protection of special nuclear material of low strategic significance while in transit or who takes delivery of such material free on board (f.o.b.) the point at which it is delivered to a carrier for transport shall: 10 CFR 73.67(3)

5.5 Response Procedures. Establish and maintain written response procedures for dealing with threats of thefts or thefts of this material. 10 CFR 73.67(g)(3)(i)

Describe the procedures to be used to satisfy the requirements listed in section 5.5 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

5.6 Receipt Notification. Make arrangements to be notified immediately of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination, and 10CFR 73.67(g)(3)(ii)

Describe the procedures to be used to satisfy the requirements listed in section 5.6 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

5.7 Lost Material Procedures/Notification. Conduct immediately a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of 10 CFR 73.71. 10 CFR 73.67(g)(3)(iii)

Describe the procedures to be used to satisfy the requirements listed in section 5.7 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

6.0 SNM Transportation Requirements - Receiver. Each licensee who receives quantities and types of special nuclear material of low strategic significance shall;

This section provides guidance on meeting the requirements of paragraph 73.67(g)(2)(i)(ii)(iii), which are as follows:

6.1 Inspection. Check the integrity of the containers and seals upon receipt of the shipment. 10 CFR 73.67(g)(2)(i)

This requirement is intended to determine whether the material's container has been compromised en route and whether any material has been removed so that immediate recovery procedures may be initiated if required.

Describe the procedures to be used to ensure that the integrity of the containers and seals will be checked upon receipt of the shipment of material. Identify the individual(s) by duty position, who will be responsible for the inspection. Describe the procedures to be taken in the event that it is discovered that the integrity of the containers or seals have been compromised.

6.2 Notification. Notify the shipper of receipt of the material as required in 10 CFR 70.54, and 73.67(g)(2)(ii)

This requirement is intended to provide the shipper with knowledge of when responsibility for the shipment has been assumed by the receiver and when the shipper's responsibility is ended.

Ensure that the receiver will send a completed copy of standard Form NRC-741, "Nuclear Material Transaction Report," to the shipper within 10 days of receiving a shipment of material as required in § 70.54 of 10 CFR Part 70.

Identify the procedure(s) used to make the notification and the individual(s) by duty position, who will be responsible for the notification.

6.3 In-Transit Physical Protection. The intent of this paragraph is to make clear that the licensee receiving the material is responsible for arranging for the physical protection of the material in transit if the shipper is not a licensee. If both the shipper and receiver are licensees, the receiver may allow the shipper to accept this responsibility either wholly or in part provided there is appropriate documentation specifying their respective responsibilities.

In its security plan, the receiver shall either acknowledge responsibility for the in-transit physical protection of SNM of low strategic significance or ensure that a written agreement from the shipper has been received in which the shipper accepts either full responsibility or shared responsibility for the in-transit physical protection of this material in accordance with 10 CFR 73.67(g)(3).

Describe the procedures to be used to satisfy the requirements listed in section 6.3 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

6.4 Response Procedures. Establish and maintain written response procedures for dealing with threats of thefts or thefts of this material. 10 CFR 73.67(g)(3)(i)

List events which require responsive actions i.e. vehicle accident, delays, theft or attempted theft, etc., provide type of response, objectives, and associated responsibilities related to those events. This information can be provided in a table/matrix format.

6.5 Receipt notification. Make arrangements to be notified immediately of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after a reasonable time beyond the estimated arrival time. 10 CFR 73.67(g)(3)(ii)

Describe the procedures to be used to ensure notification that a shipment has been received. Describe tracking methods to ensure shipments are reported as received, delayed, or lost in a timely manner.

6.6 Lost Material Procedures/Notification. Initiate immediately a trace investigation of any shipment that is determined to be lost or unaccounted for after a reasonable time beyond the estimated arrival time. 10 CFR 73.67(g)(3)(iii) Notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of 73.71 of this part. 10 CFR 73.67(g)(3)(iii)

Describe the procedures to be used to satisfy the requirements listed in section 6.6 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

7.0 Export Requirements. Each licensee who exports special nuclear material of low strategic significance shall comply with the requirements specified in paragraphs 73.67(c) and (g)(1), and (3) of this section. 10 CFR 73.67(g)(4)

Each licensee who possesses, uses, transports, or delivers to a carrier for transport 10 kg or more of special nuclear material of low strategic significance shall: 10 CFR 73.67(c)

Submit a security plan or an amended security plan describing how the licensee will comply with all the requirements of paragraphs (f), and (g) of this section, as appropriate, including schedules of implementation. 10 CFR 73.67(c)(1)

7.1 Advance Notification. The licensee shall ensure in his security plan that, prior to each shipment of material, the receiver will be notified of the impending shipment and provided the following types of information: 10 CFR 73.67(g)(i)

1. Mode of transport (e.g., truck, plane, train, or ship),
2. Estimated time of arrival,
3. Location where custody of the material will be transferred to the receiver,
4. Name of carrier, and
5. Transport identification (e.g., truck, train, or flight number; ship name).

Describe the policies and or procedures used to facilitate the advance notification requirement.

7.2 Receiver Confirmation. Prior to shipment, the shipper will be assured that the receiver is ready to accept the shipment at the planned time and location and has acknowledged the mode of transport. 10 CFR 73.67(g)(ii)

Describe what procedures will be used to ensure that shipment of material does not take place until the receiver acknowledges the planned shipment and mode of transport and states that he will be ready to accept the shipment at the planned time and location.

7.3 Containers/Tamper Seal Inspection. Transport the material is a tamper indicating sealed container. 10 CFR 73.67(g)(iii) Check the integrity of the shipment by ensuring that the material containers and any associated locks or seals are intact at the time the shipment commences. 10 CFR 73.67(g)(iv)

Describe the procedures used to confirm that only tamper indicating sealed containers are used and identify by duty position, the individual(s) responsible for confirming that the correct containers are used and that the seals are intact and properly recorded. Describe the procedures to be taken in the event that it is discovered that the integrity of the containers or seals have been compromised.

7.4 In-Transit Physical Protection. Arrange for the in-transit physical protection of the material in accordance with the requirements of paragraph 73.67(g)(3) of this part unless the receiver is a licensee and has agreed in writing to arrange for the in-transit physical protection. 10 CFR 73.67(g)(v)

Describe the procedures used to confirm that the responsibility for the in-transit physical protection is decided and finalized prior to the commencement of the shipment.

7.5 Response Procedures. Establish and maintain written response procedures for dealing with threats of thefts or thefts of this material. 10 CFR 73.67(g)(3)(i)

List events which require responsive actions i.e. vehicle accident, delays, theft or attempted theft, etc., provide type of response, objectives, and associated responsibilities related to those events. This information can be provided in a table/matrix format.

7.6 Receipt notification. Make arrangements to be notified immediately of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after a reasonable time beyond the estimated arrival time. 10 CFR 73.67(g)(3)(ii)

Describe the procedures to be used to ensure notification that a shipment has been received. Describe tracking methods to ensure shipments are reported as received, delayed, or lost in a timely manner.

7.7 Lost Material Procedures/Notification. Initiate immediately a trace investigation of any shipment that is determined to be lost or unaccounted for after a reasonable time beyond the estimated arrival time. 10 CFR 73.67(g)(3)(iii) Notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of 73.71 of this part. 10 CFR 73.67(g)(3)(iii)

Describe the procedures to be used to satisfy the requirements listed in section 7.7 above. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

8.0 Import Requirements. Each licensee who imports special nuclear material of low strategic significance shall comply with the requirements specified in paragraphs 10 CFR 73.67(c) and (g) (2) and (3) 10 CFR 73.67(g)(5)

8.1 Inspection. Check the integrity of the shipment by ensuring that the material containers and any associated locks or seals are intact at the time the shipment commences. 10 CFR 73.67(g)(2)(i)

Describe the process to be used to inspect the integrity of the container(s) and lock(s) or seal(s). Identify the individual(s) by duty position who will be responsible for the inspection. Describe the procedures to be taken in the event that it is discovered that the integrity of the containers or seals have been compromised.

8.2 Notification. Notify the exporter who delivered the material to a carrier for transport of the arrival of such material. 10CFR 73.67(g)(2)(ii)

8.3 In-Transit Physical Protection. Arrange for the in-transit physical protection of the material in accordance with the requirements of paragraph 73.67(g)(3) of this part unless the receiver is a licensee and has agreed in writing to arrange for the in-transit physical protection. 10 CFR 73.67(g)(2)(iii)

Confirm that the in-transit physical protection procedures are the responsibility of the shipper unless a written agreement with the receiver is on file, that transfers that responsibility to the receiver.

8.4 Response Procedures. Establish and maintain written response procedures for dealing with threats of thefts or thefts of this material. 10 CFR 73.67(g)(3)(i)

List events which require responsive actions i.e. vehicle accident, delays, theft or attempted theft, etc., provide type of response, objectives, and associated responsibilities related to those events. This information can be provided in a table/matrix format.

8.5 Lost Material Procedures/Notification. Initiate immediately a trace investigation of any shipment that is determined to be lost or unaccounted for after a reasonable time beyond the estimated arrival time. 10 CFR 73.67(g)(3)(iii) Notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of 73.71 of this part. 10 CFR 73.67(g)(3)(iii)

Describe tracking methods to ensure shipments are reported as received, delayed, or lost in a timely manner. Identify the individual(s) by duty position who have the responsibility to carry out the aforementioned requirements.

9.0 Recordkeeping Requirements

9.1 Security Plan. The licensee shall retain a copy of the effective security plan as a record for three years after close of the period for which the licensee possesses the special nuclear material under each license for which the original plan was submitted. Copies of superseded material must be retained for three years after each change. 10 CFR 73.67(c)(1)

Describe procedures for keeping the security plan.

9.2 Response Procedures. The licensee shall retain a copy of the current response procedures as a record for three years after close of the period for which the licensee possesses the special nuclear material under each license for which the original procedures were developed and copies of the superseded material must be retained for three years after each change. 10 CFR 73.67(g)(3)(i)

Describe procedures for retaining the response procedures.

9.3 Export Shipment Records. The licensee shall retain a copy of each record for three years after close of the period for which the licensee possesses the special nuclear material under each license that authorizes the licensee to export this material. Copies of the superseded material must be retained for three years after each change. 10 CFR 73.67(g)(4)

Describe procedures for keeping the export shipment records.

9.4 Import Shipment Records. The licensee shall retain each record required by these sections (10 CFR 73.67(c), (e)(2), (3), and (4), for three years after close of the period for which the licensee possesses the special nuclear material under each license that authorizes the licensee to export this material. Copies of the superseded material must be retained for three years after each change. 10 CFR 73.67(g)(5)

Describe procedures for keeping the import shipment records.

9.5 Other Records. Describe procedures and requirements for keeping other records required by 10 CFR but not previously listed herein..