REGULATION
144/1997

of the State Office for Nuclear Safety on Physical Protection of Nuclear Material and Nuclear Facilities and their Classification

The State Office for Nuclear Safety in accordance with § 47, Paragraph 7 to implement §4, Paragraph 8 and Paragraph 9; § 13, Paragraph 3, letter d) and Para graph 6; § 18 Paragraph 1, letter c) and § 20 Paragraph 1, letter d) of the Law No 18/1997 Coll. on Peaceful Uses of Nuclear Energy and Ionizing Radiation (Atomic Act) and on amending and complementing some laws (hereunder referred to as "Act"), enacts:

PART ONE

INTRODUCTORY PROVISIONS

Subject of regulation

§ 1

1) This Regulation determines details for the process and range of physical protection system of nuclear material (according to § 2, letter j), para 1 of the Act) and nuclear facilities (according to § 2, letter h) of the Act); for shipment of nuclear material (according to § 20, para 1, letter d) of the Act); for categorization of nuclear material (according to § 4, para 9 of the Act) and for categorization of nuclear facilities or their parts (according to § 4, para 8 of the Act); for designation of the protected, controlled and inner areas of nuclear facilities (according to § 4, para 8 of the Act); for keeping facts important to the physical protection (according to ' 18, para 1, letter c) of the Act], and for the scope and format of the documentation to be approved (according to ' 13, para 3, letter d) of the Act).

2) Physical protection in the range according to the provisions specified in the second and third parts of this Regulation shall be assured for:

   a) nuclear materials,

   b) nuclear facilities with nuclear reactors (according to § 2, letter h), paras 2, 3 and 4 of the Act) starting three months prior to the beginning of first loading of the core,

   c) other nuclear facilities (according to § 2, letter h, paras 2, 3 and 4 of the Act) starting two months prior to the delivery of nuclear material or radioactive waste.

§ 2

For the purposes of this Regulation:

a) protected area shall mean an area of the nuclear facility, the perimeter of which consists of mechanical barriers;

b) controlled area shall mean an area of the nuclear facility inside a protected area, the perimeter of which consists of mechanical barriers;

c) inner area shall mean areas inside the buildings, or rooms inside a controlled area, walled by mechanical barriers,

d) technical system of the physical protection shall mean an integrated automated system designed to control and monitor the persons and vehicles entering the individual areas; and to observe, evaluate, monitor and signal any violations of those areas, as well as to transmit the audio-visual information on any violation to the control centre using means of the computer, alarm[1)], communication and audio-visual systems,

e) physical guarding of the nuclear facilities and nuclear material in a protected, controlled or inner area shall mean the guarding service performed by the persons who fulfil the requirements according to the special regulation[2)] (hereunder referred to as "the guards"),

f) mechanical barriers shall mean fences, walls, blocks, grilles and other means impeding unauthorized entry of physical persons or preventing unauthorized access of vehicles into the protected, controlled or inner areas of a nuclear facility,

g) emergency protection shall mean concentration of forces and means of the Czech Republic Police (hereunder referred to as "Police") for an intervention to prevent any sabotage directed against a nuclear facility,

h) industrial nuclear reactor shall mean a nuclear reactor (according to § 2, letter h), para 1 of the Act) with the heat output higher than 50 MW,

i) experimental reactor shall mean a nuclear reactor (according to § 6, letter h) para 1 of the Act) with the heat output up to 50 MW, inclusive.

[1)] ÈSN 334590 Equipment of electrical physical alarm devices

[2)] ÈNR law No 455/1991 Coll. on small business (small business law), in the wording of later regulations

PART TWO

CATEGORIZATION OF NUCLEAR MATERIAL OR PARTS OF NUCLEAR FACILITIES, SYSTEM AND SCOPE OF PHYSICAL PROTECTION OF NUCLEAR MATERIAL AND NUCLEAR FACILITIES OR THEIR PARTS

§ 3

Categorization of nuclear materials

Nuclear material shall be categorized as of category I, II or III according to the Appendix to this Regulation, provided their mass is greater than the lowest limit for Category III specified in the Appendix.

§ 4

Categorization of the parts of nuclear facilities

1) Nuclear facilities or the parts of nuclear facilities with

a) industrial nuclear reactors shall be categorized:

1, as Category I, if damage caused to them may jeopardize nuclear safety. They are, in the first place, the reactor systems important to nuclear safety (according to § 2, letter d) of the Act) and the parts of nuclear facilities which contain radioactive material as well as the systems the function of which is required to prevent an unallowable radioactive leakages into the environment,

2, as Category II, if damage caused to them can not lead to an unallowable radioactive leakage into the environment, may however increase the risk to nuclear safety if two or more failures of those parts of a nuclear facility occur simultaneously,

3, as Category III, if damage caused to them can not lead to an unallowable radioactive leakage to the environment, may however increase the risk to nuclear safety if another part of nuclear facility, categorized as Category II, has failed or is damaged simultaneously.

b) experimental reactors which contain a nuclear reactor and technological systems necessary for the nuclear safety assurance shall be categorized as Category II.

2) The parts of nuclear facilities (according to § 2, letter h) para 2 of the Act) which contain nuclear material shall be categorized as of the same category as the nuclear material.

The parts of nuclear facilities (according to § 2, letter h) paras 3 and 4 of the Act) which contain radioactive waste shall be categorized as Category III.

§ 5

General requirements for the categorization of nuclear material and parts of nuclear facilities

1) The measures of physical protection of nuclear facilities shall be implemented to comply with the highest category of nuclear material handled in the facility, and with the highest category of a part of this nuclear facility.

2) The category with the highest requirements for the level of physical protection is Category I.

3) Nuclear material in quantities smaller than the mass limit for Category III according to Appendix to this Regulation shall be secured against misuse and unlawful activities.

4) If the parts of a nuclear facility classified into different categories can not be physically separated, these parts shall be placed, as a whole, into the area according to § 6, para 1 of the Regulation to satisfy the requirements for the part with the highest category.

§ 6

Some details for the designation of guarded, protected and inner area

1) Nuclear material and parts of nuclear facilities categorized as

a) Category I shall be placed inside the inner area,
b) Category II shall be placed inside the controlled area
c) Category III shall be placed inside the protected area

2) For nuclear material and parts of nuclear facility classified as Category I the areas are designated so that:

a) along the perimeter of the protected area should be an isolation zone with a minimum width of 6 m, fenced in with two fences at least 2.5 m high and with additional mechanical impeding devices on the fence crown or within the isolation zone; the perimeter itself consists of mechanical barriers which prevent unauthorized entry of a vehicle; the perimeter is equipped with at least two detection systems working on different physical principles and at least one of them is detecting in volume; isolation zone is equipped with television hardware and with an illumination sufficient for the application of television; both sides of this isolation zone are surrounded with a free area at least 6 m wide; if a part of the perimeter is represented by a building, the protection of its external side shall be of the same level as that of a barrier with alarms and television hardware,

b) the inner boundary of the protected area, which is the outer boundary of the controlled area, consists of another fence with a height of at least 2.5 m equipped with the intrusion detection up to a height of 3 m and with television systems,

c) the inner boundary of the controlled area which is a boundary of the inner area, walls of the buildings or rooms inside the protected area are equipped with the intrusion detection alarm systems, the number of entries of persons and vehicles should be minimized.

3) For nuclear material and parts of nuclear facility classified as Category II the areas are designated so that the perimeter of the protected area consists of a fence at least 2.5 m high with a mechanical impediment on the fence crown. The inner boundary of the protected area represents the perimeter of the controlled area and consists of an another fence at least 2.5 high also with mechanical impediments, alarm and television systems. If the walls of buildings with nuclear material or with parts of the nuclear facility classified as Category II, are of sufficiently solid construction, and the results of a security survey according to § 19, para 1, letter h) of this Regulation prove that physical protection is ensured, such walls can

be used as the perimeter of the controlled area, and in this case they should be provided with the intrusion detection alarm and television systems.

4) For nuclear material and parts of nuclear facility classified as Category III the areas are designated so that the perimeter of protected area consists of a fence at least 2.5 m high with mechanical impediments on the fence crown. The building/room with nuclear material or with a part of the nuclear facility, classified as Category III, is secured with the intrusion detection or by protecting the room with such material or equipment using alarm devices.

5) In exceptional and justified cases, the individual areas can be combined, or the requirements for the perimeters specified in paras 2, 3, 4 can be changed, then however, the efficiency of mechanical impeding devices and alarm systems should be strengthened and the results of efficiency assessment according to § 18, para 1, letter h) of this Regulation should confirm that physical protection is ensured.

6) Emergency exits and underground channels under the perimeter of protected and controlled areas should be secured against unauthorized entry from the outside and should be equipped with alarm devices.

§ 7

Access of persons and vehicles

1) Access to protected, controlled or inner areas shall be limited to

a) employees and persons whose trustworthiness and compliance with the requirements according to the law, if applicable (§ 18, para 1, letter l) of the Act), has been verified,

b) inspectors of the Office,

c) policemen who provide emergency protection of the nuclear facility.

2) Licensees (according to § 9, para 1 of the Act) should

a) permit access to members of the authorized surveillance bodies in accordance with the special regulations[3)], for which the performance of the state surveillance is given by a law on their sphere of activity, under the condition that for the whole period of sojourn inside these areas they shall be escorted by an employee, ascribed by the licensee, or by a security guard,

b) permit access of other persons to protected, controlled areas and in exceptional cases - also to inner areas under the condition that for the whole period of sojourn they shall be escorted by an employee assigned by the licensee or by a security guard.

3) In the event of emergency, according to a special regulation, when an off-site intervention of external persons and response force according to the off-site emergency plan is required, the licensee shall permit access to the area. In such cases, the licensee should prepare, not later than within 3 days from the end of intervention, a list of the personal data of all

persons who intervened and a list of the vehicles which have been used in the course of such intervention.

[3)] Law No 61/1988 Coll. on mining activity, explosives and on the state mining board

§ 8

Administrative and technical measures for Category I

1) Nuclear material and nuclear facilities or their parts classified as Category I shall be secured by a technical system of physical protection, the control system of which comprises the main and emergency control centre; the physical protection system can be controlled from any of them. The whole system should have a redundant power supply, both the main and emergency control centre should be equipped with alarms.

2) Any person authorized for the access into protected, controlled and inner areas should be issued with an identification card which permits an automatic control and registering of the entries. Entry of persons can be also controlled by means based on the biometric identification principle (for instance, hand geometry, fingerprints). The number of persons entering these areas should be kept to the minimum necessary. Up-to-day access database should be readily available for 1 month, and should be archived for 1 year.

3) The technical system of physical protection shall permit that events important for the assurance of physical protection, such as the issuance of access identification cards, data on passage of persons and vehicles from the dedicated automatic control device and data on alarm signals from the alarm systems are archived.

4) The ratio of the number of visitors to the inner area to the number of their escorts should not exceed 3 : 1, and the ratio of the number of visitors to the controlled area to the number of their escorts should not exceed 8 : 1.

5) All persons, luggage and vehicles should be controlled at the entry to the protected area to prevent the introduction of articles which jeopardize nuclear safety, such as weapons, explosives, alcoholic beverages, drugs, and at the exit - to prevent attempted removal of nuclear material.

6) If persons enter into the inner area important to nuclear safety, the simultaneous presence of at least two employees of the licensee should be ensured.

7) Administrative measures should be taken to ensure permanent archiving of the records according to § 18, para 1, letters l) and m) of this Regulation vital for granting access without escort, and for recording possession of the keys to the selected rooms in controlled and inner areas and for archiving these records for the period of one year.

8) During movement of nuclear material within protected and controlled areas and between these areas and the inner area, their physical protection should be provided.

9) For the storage facilities of Category I nuclear material should be required that nuclear materials are stored in a room with the walls from reinforced concrete and one entrance only, with the door constructed to prevent unauthorized access from outside and fitted with alarm systems. This room should be located in a building equipped with intrusion detection system, within the inner area, and should be fitted with alarm and television systems and special locks; access can be permitted to assigned employees only. Other persons may be permitted access only with escorts assigned by the licensee or guards.

10) Physical guarding should be provided without interruptions.

11) Protected and controlled areas should be patrolled by the guards

12) Telephone and radio communications are provided between guard posts, control centre and emergency control centre, and between the control centre and the police emergency station.

13) Documentation necessary to counter situations connected with a break of physical protection shall be prepared.

§ 9

Administrative and technical measures for Category II

1) Nuclear facilities or their parts and nuclear material classified as Category II should be equipped with alarm systems. Alarms should be signalled on the central panel of the guard service or at the local police station, and all data on alarm signals should be archived.

2) Physical protection should be provided without interruptions.

3) All persons who enter controlled area should be issued with an identification card which permits an automatic control of the entries into this area, there should be a device for an automatic control of access that ensures that the records on the identification cards issuance and on the passing the automatic control device are archived.

4) The ratio of the number of visitors to the number of escorts can be 8 : 1, as a maximum.

5) Spot-check of persons and luggage should be performed at the entry to controlled area. All luggage which is carried in and persons who enter controlled area should be searched to prevent the introduction of articles that jeopardise nuclear safety, especially such as weapons, explosives, alcoholic beverages and drugs.

6) Vehicles and all packages coming to controlled areas should be controlled to prevent unauthorized access of persons and introduction of articles which jeopardise nuclear safety.

7) Administrative measures should be taken to ensure permanent archiving of all records on the access permits, records on custody of keys to the areas with nuclear material and their archiving for a period of one year.

8) Documentation necessary to counter situations connected with a break of physical protection shall be prepared.

§ 10

Administrative and technical measures for Category III

1) Nuclear material and nuclear facilities or their parts classified as Category III should be placed in a protected area with controlled access.

2) Buildings with nuclear material of Category III or radioactive waste (according to § 2, letter h) paras 3 and 4 of the Act) should be equipped with alarm systems, signals of which should be displayed on the central protection panel, or they should be continuously guarded by the police, archiving of the all alarm data should be ensured.

§ 11

Security guards

Security guards on physical protection duty at the guard posts of Category I nuclear facilities should be armed with a short hand weapon of a calibre not larger than 9 mm, and should satisfy requirements specified in the special regulations[4), 5)].

[4)] § 34 of Law No 288/1995 Coll. on fire arms and ammunition (Law on fire arms)
[5)] § 13 and § 14 of Law No 140/1961 Coll. penal code, in the wording of later regulations.

§ 12

Protection of the technical system of physical protection and its data

1) The technical system of physical protection shall not be interconnected by any communication lines with other computerized systems which are not dedicated to the assurance of physical protection and to the activities directly related to physical protection, no part of this system shall be located outside the outer boundary of protected areas.

2) The technical system of physical protection may be connected with a computer system for its administration and maintenance.

3) The computer system for administration and maintenance is operated under exactly the same conditions as the technical system of physical protection.

4) Data from the system should be used solely for the purposes of physical protection assurance, they should be accessible only to the persons assigned by a licensee and to inspectors of the Office.

§ 13

Administrative and technical measures for the physical protection assurance during construction of nuclear facilities

1) The site of a nuclear facility should be fenced and guarded, access of persons and vehicles should be controlled.

2) Buildings in which Category I and II parts of nuclear facilities will be located should be protected as required for the Category III level from the moment the assembling of technology begins.

3) The range of physical protection provided should be consistent with the progress of construction, the parts of a nuclear facility which are in operation should be isolated from those under construction.

PART THREE

SYSTEM AND SCOPE OF PHYSICAL PROTECTION OF NUCLEAR MATERIAL IN TRANSPORT

§ 14

General provisions

1) Physical protection of the nuclear material shipments should be ensured according to the requirements relevant for the category which has been assigned to the nuclear material according to § 3 of this Regulation; Category I and II nuclear material when transported outside of protected areas requires special police guards (hereunder referred to as "police escort"[6)]). Shipment of Category III nuclear material requires, as a minimum, the transport supervision which is assured by two-way radio or telephone communication between the load vehicles and the shipper, receiver and/or the Office and police; there should be a written agreement between the shipper and receiver stating that the shipment would be taken over with a take-over report upon its delivery.

2) Shipments should be conform to other requirements according to the special regulation[7)].

3) If the shipper discovers a loss or unauthorized handling of the nuclear material shipped or if there is a threat that such action may take place, he should immediately perform the corrective measures to ensure nuclear safety and radiation protection. The licensee should inform about these facts the Office (according to § 17, para 1, letter j) of the Act) and the local police, without any delay.

4) In transport should be

a) minimized the total time of transport, while nuclear safety should remain unimpaired,

b) minimized the number and duration of nuclear material transfers, i.e. transfer from one conveyance to another, transfer to temporary storage and temporary storage while awaiting for arrival of vehicle; nuclear safety should remain unimpaired,

c) assured physical protection during temporary storage in a manner consistent with the category of the shipped material,

d) in advance verified trustworthiness of persons and fulfilment of the requirements according to the special regulation[8)],

e) advance information on shipment limited to the minimum number of persons necessary.

5) Protection of transport data including detailed data on the route, schedule and on the coding of messages transmitted through means of communication should be assured in accordance with the special regulation[8)].

[6)] § 2, para 1) letter h) of ÈNR law No 238/1991 Coll. on the Czech Republic Police, in the wording of later regulations

[7)] Regulation No.../1997 Coll. on shipment and transport of radioactive material and radionuclide emitters

[8)] Law No 102/1971 Coll. on state secret protection, in the wording of later regulations

§ 15

SYSTEM AND SCOPE OF PHYSICAL PROTECTION OF CATEGORY I AND II NUCLEAR MATERIAL IN TRANSPORT

1) The shipper should give the receiver advance notification of the planned shipment specifying the mode of transport (by road, rail, sea, air, river, combined), the estimated time of the shipment arrival and the exact point of hand-over in the Czech Republic.

2) The receiver should confirm his readiness to accept delivery at the proposed time and point.

3) The mode of transport and the route should be chosen so as to keep to a minimum the number of cargo transfers and the length of time the cargo remains in transit, consideration should be also given to the security situation along the route.

4) Nuclear material should be shipped in closed and locked vehicles or in transport packages. If the mass of a shipment exceeds 2000 kg, it can be transported on an open vehicle with tarpaulin cover either fitted on circular supports or simply covering the package. If tarpaulins are used, the shipment should be secured by a sealed lock.

5) There should be a phyrotechnical check-up of the load vehicle prior to loading.

6) The shipper[7)] should give the receiver a written instruction specifying the applied measures of physical protection, the prescribed route, the stopping and transfer places, the personal data of persons authorized to accept the delivery, the reporting procedures for the progress of transport, cooperation with the police escort including communication, and the emergency procedures according to the special regulation[7)]

7) Upon delivery, the receiver should check the integrity of the package, locks and seals and accept the delivery, with the take-over report. He should notify the shipper of the take-over immediately.

8) For domestic shipments, two-way radio communication or frequent telephone communication between the vehicle and the shipper, receiver, police and the Office should be ensured.

9) For international shipments, the points at which physical protection responsibilities are transferred from the shipper to the receiver should be established.

10) For the shipments of nuclear materials to the Czech Republic or for their transit, a pyrotechnical search of load vehicles should be performed prior to accepting the Czech Republic responsibility.

[7)] Law No 102/1971 Coll. on the protection of state secret, in the wording of later regulations.

§ 16

SYSTEM AND SCOPE OF PHYSICAL PROTECTION OF CATEGORY I AND II NUCLEAR MATERIAL RELATED TO THE MODE OF TRANSPORT

1) Shipment by road

a) Only such load vehicles should be used which are

1, specially designed to resist attack and prevent unauthorized removal of nuclear material,

2, equipped with a vehicle disabling system,

3, used exclusively for transporting nuclear material

4, accompanied by the police escort.

b) It should be assured that

1. continuous police surveillance over the shipment and check of the locks and seals at each stop is maintained,

2. in the event the transport can not be completed in one day, during an overnight stay the load vehicle is immobilized or parked in a locked and guarded building,

3. two-way radio communication between the load vehicle and the police escort vehicle is maintained, and the arranged signals are exchanged,

4. the transport and alternative route are reconnoitred and protected.

2) Shipment by rail

a) shipment should be in a separate train or as a part of a goods train,

b) shipment wagon should be under surveillance of the police escort, the licensee should arrange that a sufficient number of carriages is available for the police escort.

3) Shipment by air should be in a designated charter aircraft. Physical protection should be ensured prior the take-off and after landing.

§ 17

SYSTEM AND SCOPE OF PHYSICAL PROTECTION OF CATEGORY III NUCLEAR MATERIAL IN TRANSPORT

1) The shipper of Category III nuclear material should give the receiver advance notification of the planned shipment specifying the mode of transport, the estimated time of the shipment arrival and the exact point of hand-over in the Czech Republic.

2) The receiver should confirm to the shipper his readiness to accept delivery.

3) Where practicable, the locks and seals should be fitted onto vehicles or freight packages.

4) The receiver should notify the shipper of the arrival of the shipment immediately upon the take-over report signature.

PART FOUR

SCOPE AND FORMAT OF THE DOCUMENTATION TO BE APPROVED BY THE OFFICE

§ 18

1) The proposal of physical protection assurance (according to Appendix B to the Act) should contain, particularly:

a) the analysis of the possibility of unauthorized handling of nuclear material and nuclear facility, and evaluation of the impacts of such handling,

b) the analysis, which will result in a proposal to catigorize the nuclear facility or its part as Category I, II or III - according to § 4 of this Regulation,

c) the proposal of the nuclear material categorization according to § 3 of this Regulation,

d) the detailed function analysis of the proposed technical system of physical protection or alarm systems,

e) the assessment of detectors and central panels of the electric alarm system performed by an authorized state testing laboratory,

f) the license for designing, installing and assembling of alarm systems, in accordance with the special regulation[2)],

g) the quality assurance programme of physical protection for the period of nuclear facility service, in accordance with the special regulation[9)],

h) the efficiency assessment for the proposed physical protection performed using mathematical models,

i) the proposal of preliminary administrative measures, according to § 18, para 2, letter d) of this Regulation, for physical protection,

j) the analysis of physical protection with regard to construction, start-up and operation of the nuclear facility, and to anticipated emergencies,

k) the description of the measures of physical protection during nuclear facility construction.

2) Documentation related to the system of physical protection assurance (according to Appendix C, letter a), para 5 of the Act) should contain, particularly:

a) proof that changes of the original design according to § 18, para 1, letter d) of this Regulation would not diminish the level of physical protection,

b) evaluation of the results of a 144 hour complex test of the technical system of physical protection or of the alarm system, the results of television hardware tests, tests of physical protection efficiency, tests of the elements of technical or alarm systems applied for physical protection,

c) the programme of complex testing of the technical system of physical protection or of the alarm system,

d) administrative measures, which should include

1, verification of trustworthiness and compliance with the requirements, according to the special regulation[8)], and keeping the relevant documentation,

2, regime measures for access permission,

3, check-out system for the access identification cards or passes, and keeping the relevant records, according to § 8, para 2; § 9, para 3; § 10, para 1 and § 13, para 1 of this Regulation,

4, guidelines for the key management, and keeping the relevant records, according to § 8, para 7 and § 9, para 7 of this Regulation,

5, guidelines for the manipulation, operation, maintenance and testing of the technical system of physical protection or of the alarm system, according to § 8, para 1; § 9, para 1 and § 10, para 2 of this Regulation,

6, guidelines for archiving the access data, according to § 8, para 7, § 9, para 7 and § 10, para 1 of this Regulation; the alarms data, according to § 8, para 3, § 9, para 1 and § 10, para 2 of this Regulation; information on the physical protection breaks according to § 8, para 13 and § 9, para 8 of this Regulation; the system testing data,

7, documentation for the physical security which contains the structure and management of the guard service, the contract on the security services signed with the licensee, the guard duties, the licensee's documentation necessary to counter physical protection breaks, the plans of guards training for the physical protection service at nuclear facilities and verification of their qualification.

e) the operational procedures and/or the limits and conditions of the nuclear facility, and measures related to limiting its operation in the event of an attempt at an unauthorized activity at nuclear facility or a physical protection break,

f) agreements with the police on the emergency protection assurance of nuclear facilities and the police escorts of the shipments of nuclear material, and on the connection of alarm systems to the police central panel, if applicable,

3) Documentation of the changes in the physical protection system (according to Appendix C, letter b), section II.7 of the Act) should contain all changes implemented since the documentation has been submitted according to § 18, para 2 of this Regulation.

4) Documentation on the assurance of physical protection of nuclear material in transport (in accordance with Appendix M, section 8 of the Act) should demonstrate in detail how the requirements for the physical protection of nuclear material in transport, specified in § 14 - § 17 of this Regulation, are fulfilled; it should also contain a proposal of the categorization of transported nuclear material taking into account the physical protection issues (according to Appendix M, section 7 of the Act).

PART FIVE

FINAL PROVISIONS

§ 19

This Regulation enters into force on July 1, 1997.

Appendix to Regulation No.../ 1997 Coll.

CATEGORIES OF NUCLEAR MATERIAL

A. Unirradiated[a)] nuclear material

No	Material	Form	Category I	Category II	Category III
1	Plutonium[b]				
			2 kg of more	less than 2 kg but more than 0.5 kg	0.5 kg or less but more than 15 g[c)]
2	Uranium 235	Uranium enriched to 20 % ^{235}U	5 kg ^{235}U or more	less than 5 kg ^{235}U but more than 1 kg ^{235}U	1 kg ^{235}U or less but more than 15 g ^{235}U[c)]
3	Uranium 235	Uranium enriched to 10 % ^{235}U or more but less than 20 %		10 kg ^{235}U or more	less than 10 kg ^{235}U but more than 1 kg ^{235}U
4	Uranium 235	Uranium enriched above natural but less than 10% ^{235}U			10 kg ^{235}U or more[c)]
5	Natural uranium				more than 1000 kg
6	Depleted uranium[d)]				more than 2000 kg
7	Uranium 233		2 kg or more	less than 2 kg but more than 0.5 kg	0.5 kg or less but more than 15 g[c)]
8	Thorium[d)]				more than

					1000 kg

B. Irradiated nuclear material

Nuclear material (depleted uranium, natural uranium, thorium or low enriched fuel with content of fissile isotope - Pu, ^{233}U, ^{235}U less than 10 %) irradiated in a reactor are assigned Category II. For nuclear materials classified as Category I or II prior irradiation, one category level may be reduced if the dose rate from such a material exceeds 1 Gy/h at one meter unshielded.

Notes:

[a)] material not irradiated in a reactor or material irradiated in a reactor with a dose rate equal or less 1 Gy/h at one meter unshielded

[b)] plutonium with isotopic concentration ^{238}Pu higher than 80 % can be excepted by the Office

[c)] quantities not falling into Category III should be protected at least in accordance with procedures used for the protection of valuable property

[d)] does not apply for uranium and thorium ores and the materials arising in the course of their treatment, but applies for uranium concentrate.