

389.

POLICY

ON THE CONDITIONS FOR TRADE AND USE OF RADIOACTIVE MATERIALS, X-RAY MACHINES AND OTHER DEVICES THAT PRODUCE IONIZING RADIATION

("Official Gazette of the Federal Republic of Yugoslavia", No. 032/98 of 03.07.1998) I. BASIC PROVISIONS Article 1

1. This Regulation prescribes the conditions for trade and use of radioactive materials, X-ray machines and other devices that produce ionizing radiation (hereinafter: sources of ionizing radiation).

Article 2

2. The above terms within the meaning of this Regulation shall have the following meanings:
 - 1) Radioactive material means material containing one or more radionuclides whose specific activity (Bj/g) and total activity (Bj) are above the established limits set out in Annex 1, which is printed with this Regulation and forms an integral part thereof;
 - 2) Trade in sources of ionizing radiation is the import, export, sale, procurement, storage and other means of trade in sources of ionizing radiation;
 - 3) A sealed source of ionizing radiation is a radioactive material that is hermetically sealed in a capsule designed to prevent the distribution of the radioactive material into the environment under normal conditions of use.
 - 4) An open source of ionizing radiation is a radioactive material in a liquid, gaseous or powdery state, which is not hermetically sealed and which may cause contamination of the environment.
 - 5) Devices with closed sources of ionizing radiation are devices that contain a closed source of radiation and are used for obtaining and using defined radiation beams (radiographic, calibration, sterilization, therapeutic and others) as well as devices of measurement process technology (thickness gauges, density meters, level gauges, static electricity eliminators, etc.);
 - 6) ionizing radiation generators are electrical devices used to produce X-rays, as well as ionic, neutron or electron beams;
 - 7) An accelerator is a device or plant in which, by accelerating charged particles, ionizing radiation is produced, the energy of which is greater than 1 MeV;
 - 8) Other devices that produce ionizing radiation are electrical devices that emit ionizing radiation and contain a part that operates on a potential difference greater than 5 kV.

II. CONDITIONS FOR TRADE AND USE OF SOURCES OF IONIZING RADIATION Article 3

3. Legal entities and entrepreneurs who trade in ionizing radiation sources must have:
 - 1) An employed person who has at least 4 degrees of professional education and who is qualified to implement measures of protection against ionizing radiation;
 - 2) appropriate premises for the safe storage and storage of radioactive sources of ionizing radiation, unless the import or procurement of sources of ionizing radiation is carried out on behalf of the user and delivered directly to the user without prior storage;
 - 3) Instructions on measures of protection against ionizing radiation and on the procedure in the event of an accident, prominently displayed in the room where radioactive sources of ionizing radiation are stored and stored.

Legal entities and entrepreneurs referred to in paragraph 1 of this Article must, before placing ionizing radiation sources on the market, obtain the opinion of an authorized legal entity on the fulfillment of measures of protection against ionizing radiation for placing these sources on the market.

Article 4

Legal entities and entrepreneurs who use sources of ionizing radiation other than those referred to in Article 5 of this Regulation (hereinafter: users) must have:

- 1) appropriate premises prescribed by the applicable standard for the safe handling of sources of ionizing radiation and for their safe storage;
- 2) employed persons who meet the prescribed conditions for working with a certain type of source of ionizing radiation;
- 3) An employed person who is qualified for the implementation of measures of protection against ionizing radiation, and who has at least a 7th degree of professional qualification, for the use of sources of ionizing radiation for medical and scientific research purposes, or at least 4th degree of professional qualification, for the use of sources of ionizing radiation for other purposes;
- 4) Instruction on measures of protection against ionizing radiation and on the procedure in case of an accident, prominently displayed in the premises where the sources of ionizing radiation are located;
- 5) A radiation and contamination monitor, except for X-ray diagnostic sources, appropriate to the type of ionizing radiation source and which meets the prescribed metrological requirements for use in protection against ionizing radiation.

The user is obliged to provide regular annual dosimetric control for each source of ionizing radiation, and semi-annual dosimetry control for open sources of ionizing radiation.

X-ray machines, accelerators and other apparatus producing ionizing radiation may not be used for advertising and other purposes if such use may result in the exposure of persons and the population to ionizing radiation beyond the prescribed limits.

Article 5

The user is obliged to provide dosimetric control of the conditions of use of the following sources of ionizing radiation every two years:

- 1) apparatus and apparatus containing radioactive substances with which direct contact is not possible or their uncontrolled release is impossible, and which, at a distance of 0.1 m from any point on the external surface, do not give an equivalent radiation dose of more than 1 mSv/h;
- 2) Ionizing radiation generators and devices which, in the course of normal operation, do not impose a value of the equivalent dose of radiation in the air exceeding 1 mSv/h at a distance of 0.1 m from any accessible point on the outer surface;
- 3) Devices which, in the course of operation, produce ionizing radiation, if, in normal operation at a distance of 0.1 m from any accessible point on the outer surface, the intensity of the equivalent radiation dose in the air does not exceed 1 mSv/h;
- 4) Ionizing radiation generators in which the energy of the radiation produced is not more than 5 keV.
- 5) Verified working standards of radioactive sources of ionizing radiation used for the calibration of measuring equipment.

The user referred to in paragraph 1 of this Article must have an employed person who is qualified to implement measures of protection against ionizing radiation.

Article 6

Closed and open sources of ionizing radiation, as well as devices with built-in sources of ionizing radiation when not in use, shall be stored in a repository.

The location and construction of the storage must be such as to provide fire protection and to meet the requirements of the applicable standards.

If radioactive gases, vapours and aerosols are released during the storage of sources of ionising radiation, the storage must be ventilated with suitable filters.

Article 7

Storage, containers, glass and other containers for storing sources of ionizing radiation should be easy to open and close. The opening of containers with highly flammable and volatile radioactive substances is carried out with special precautions.

Article 8

Glass containers containing liquid radioactive solutions must be placed in metal or plastic containers of sufficient capacity to accommodate the entire quantity of the liquid in the event of breakage.

Article 9

Individual vessels for the storage of sources of ionizing radiation, as well as the doors of individual compartments in the store, must be marked with a mark indicating the type and activity of the source of ionizing radiation.

Article 10

The total activity of the ionizing radiation sources in the storage shall not exceed the activity specified in the solution for use, provided that the total activity of the long-lived open radiation sources shall not exceed the annual consumption.

Article 11

Sources of ionizing radiation should be stored in such a way that exposure to radiation from other sources of radiation is minimized when they are left and taken out of storage.

Access to and stay in the repository is allowed only to persons designated by the user and who are qualified to implement measures of protection against ionizing radiation.

Article 12

Sources of ionizing radiation may be transported and transported within the premises and the user's circle only in containers that attenuate the radiation to the prescribed level and prevent their release or loss.

In the working room where ionizing radiation sources are used, the instruction of the authorized legal entity on the use of ionizing radiation sources and the procedure in case of an accident must be placed in a visible place.

Article 13

If users of ionizing radiation sources do not plan to use them further, they will inform the Federal Ministry of Labor, Health and Social Policy.

The sources of ionizing radiation referred to in paragraph 1 of this Article may be stored by the user in his storage for a maximum of 3 years.

After the expiry of the period referred to in paragraph 2 of this Article, the sources shall be considered radioactive waste.

III. CLOSED SOURCES OF IONIZING RADIATION Article 14

A device with a closed source of ionizing radiation must be resistant to mechanical, thermal and other effects and must comply with the technical conditions of use.

Devices with closed sources of ionizing radiation must be used under the conditions provided for in the technical documentation.

Sealed sources of ionizing radiation cannot be used if they are mechanically damaged or if there is a possibility of radiation leakage.

Article 15

A device with a closed source of ionizing radiation must be equipped with a safety mechanism that allows the source to be transferred from the operating position to the position when not in use.

Article 16

When using devices with closed sources of ionizing radiation outside specially designated rooms, the following protective measures must be taken:

- 1) Prohibition of the presence of persons who do not work with sources of ionizing radiation in the vicinity of such sources where the level of radiation is such that the limit of the effective dose of radiation prescribed for an individual member of the population may be exceeded;
- 2) installation of warning signs RADIATION HAZARD and devices for sound and light warning of radiation hazards;
- 3) the use of movable and other shelters;
- 4) the use of ionizing radiation sources in conditions of the greatest possible distance from the personnel operating the device and other persons;
- 5) Directing the radiation beam should be done towards the floor or to the side where no people are present.

Article 17

The intensity of the equivalent dose of radiation on the external surfaces of stationary devices with closed sources of ionizing radiation must not exceed 1 mSv/h, and at a distance of 1 m, it must not exceed 0.02 mSv/h.

The strength of the equivalent dose of gamma radiation on the outer surface of transmission devices with closed sources of ionizing radiation shall not exceed 0.5 mSv/h, and at a distance of 1 m, it shall not exceed 0.01 mSv/h.

Article 18

Ionizing radiation sources used for industrial radiography are stored and used in a flaw detector container that is locked when the radiation source is in it.

The keys to the container of the flaw detector and the storage room for their storage can only be disposed of by persons who meet the prescribed conditions for working with sources of ionizing radiation in industrial radiography.

Article 19

A flaw detector with a source of ionizing radiation can only be taken out of the storage room and the circle of users by the person in charge of performing a certain job, with a signature on the takeover of the flaw detector with the source of ionizing radiation.

The person referred to in paragraph 1 of this Article shall be responsible for the protective measures provided for during the transfer, transport and use of the flaw detector.

Irradiation in industrial radiography is carried out by at least two persons who meet the requirements for working with these sources and who must be present at all times during the operation of the flaw detector.

After completing the work with the flaw detector, it is necessary to use radiation measuring instruments, check whether the source is in the flaw detector, and then lock the flaw detector.

Article 20

Devices with closed sources of ionizing radiation used in measurement process technology and automation must be designed in such a way that they can withstand all external influences and maintain their integrity under all conditions of use.

The position of the sources of ionizing radiation in the device and the position of the device in the technological process and the measures taken to protect against ionizing radiation must ensure that the strength of the absorbed doses on the surface of the parts of these devices does not exceed 0.1 mSv/h, and at a distance of 1 m, it does not exceed 0.02 mSv/h.

The area around the device with a closed source of ionizing radiation (radiation zone) referred to in paragraph 1 of this Article must be marked with the marking: DANGER RADIATION.

Article 21

Devices with closed sources of ionizing radiation used in measurement process technology and automation can only be repaired in a special room by persons who are professionally trained to perform this work. During the repair of the device, the presence of persons other than the person responsible for the implementation of measures of protection against ionizing radiation is not allowed.

IV. OPEN SOURCES OF IONIZING RADIATION Article 22

All procedures with open sources of ionizing radiation, depending on the class of work performed, must be carried out in laboratories which meet the prescribed requirements regarding the number, arrangement, size and equipment of the rooms in which these works are performed.

The class of jobs referred to in paragraph 1 of this Article shall be determined depending on the type of radionuclide and its activity at the place of work, as follows:

The activity of radionuclide A(i) is given in Annex 1 of this Regulation.

Job class	Limit permissible values	Activities for work
		on the work surface in the hood
I	1-100 A(i) 1-1000 A(i)	
II		100-1000 A(i) 1000-10000 A(i)
III		>1000 A(i) >10000 A(i)

Article 23

Facilities and premises in which open sources of ionizing radiation are used must be designed according to the applicable standards and meet the conditions prescribed for safe work with these sources and for the implementation of measures of protection against ionizing radiation.

Article 24

When working with open sources of ionizing radiation, a monitor of the level of radioactive contamination of surfaces appropriate to the type and strength of the radiation source and a dosimeter for measuring the level of radiation must be provided, which meet the prescribed metrological conditions.

Article 25

Rooms for working with open sources of ionizing radiation must be concentrated in one part of the building.

For premises where no further storage or use of open sources of ionizing radiation is planned, it must be determined by the authorized legal entity whether they are safe for use for other purposes and, if necessary, decontamination must be carried out.

Article 26

Work with open sources of ionizing radiation of class I is carried out in special rooms, and if the release of radioactive aerosols is expected, these work is carried out in ventilated digesters.

Article 27

Rooms intended for open-source work of Class II ionizing radiation must be located in a separate part of the building, so that they are isolated from other rooms and contain a wet fixture pass and a contamination monitor.

Article 28

Rooms intended for work with open sources of ionizing radiation of class III shall be located in a separate building or isolated part of the building with a separate entrance and a sanitary pass.

The rooms referred to in paragraph 1 of this Article shall be divided into several radiation zones between which a sanitary pass shall be placed.

Article 29

Ventilation should be designed to ensure that air cannot circulate in rooms where radionuclides are used, and cannot pass into rooms where open sources of ionizing radiation are not used.

If more than one room is operated with open sources of ionizing radiation of different activities, ventilation should ensure that the airflow is from the room below to the rooms of the higher activity.

Article 30

Sewage from rooms for working with open sources of ionizing radiation should be constructed as a separate sewage system with a separate tank for the reception of liquid radioactive waste. The pipeline should be marked with a standard sign of radioactivity every three meters.

Article 31

A room for working with open sources of ionizing radiation must have an area of at least 3 m² per employee in the room. If work is carried out with high-activity radionuclides, the number of people in the workplace must be as small as possible, but not less than two people.

Article 32

Generators of short-lived radionuclides should be coated with an appropriate shield and designed in such a way that the equivalent dose strength on the outer surface of the coating does not exceed a value of 0.5 mSv/h.

V. X-RAY MACHINES AND ACCELERATORS**Article 33**

Facilities and rooms in which X-ray machines and accelerators are located and used must be designed according to the applicable standards and meet all prescribed conditions for safe work with these devices and for the implementation of measures of protection against ionizing radiation.

The room in which the single-tube X-ray diagnostic machine or accelerator is located must have an area of at least 20 m².

If a diagnostic X-ray machine with two or more X-ray tubes is used in a single room, which are switched on at the same time, the area of the room per X-ray tube shall be at least 15 m².

The room in which the X-ray machine is used for breast imaging must have an area of at least 12 m².

The room in which the X-ray machine is used for therapeutic purposes must have an area of at least 16 m².

A room in which an X-ray machine is used for imaging teeth whose high voltage of the X-ray tube does not exceed 60 kV must have an area of at least 4 m².

A room in which an X-ray machine is used for imaging teeth whose high voltage of the X-ray tube exceeds 60 kV, as well as an X-ray machine for imaging teeth and jaw status, must have an area of at least 10 m².

A dental X-ray machine can also be used in the office, provided that only the dentist and the patient are present in the office at the time of imaging.

Article 34

Only one X-ray machine with several X-ray tubes can be located in one room, depending on its purpose, if the high voltage of the X-ray tube is not more than 150 kV.

X-ray machines in which the high voltage of the X-ray tube exceeds 150 kV, X-ray machines used for treatment and accelerators must be located in at least two rooms. In one room, a patient carrier is placed on which illumination, imaging or irradiation is performed, and an X-ray tube, i.e. an accelerator, and in the other room, a command device and other parts of the X-ray machine or accelerator.

Exceptionally, two X-ray machines can be placed in one room, provided that the convenient electrical connection excludes the possibility of using more than one X-ray machine at the same time.

Article 35

X-ray machines for illumination must have a switch for the electrical supply of the X-ray tube so that power is possible only while the switch is pressed.

The X-ray machines referred to in paragraph 1 of this Article must have an exposure time indicator or an inlet dose monitor on the surface of the patient's skin.

Article 36

X-ray machines used for mammography and systematic imaging of the lungs must be equipped with a device for automatic determination of the radiation dose.

X-ray machines, installed in vehicles, used for systematic imaging of the lungs, must have a closed cabin for the patient. The door on the cabin must be equipped with an automatic switch to turn off the high-voltage X-ray tube when opening the door.

A protective tube must be provided between the imaging cabin and the X-ray tube to prevent X-ray radiation from penetrating into the space outside the cabin.

The timer used in mobile X-ray machines and dental X-ray machines must allow the radiation source to be switched on from behind the screen or from an adjacent room.

Article 37

The tubes of the X-ray machine used to scan the teeth must provide a minimum distance between the focus and the patient's skin in accordance with the current standard, as well as protection from parasitic radiation.

The tubes referred to in paragraph 1 of this Article must contain information on the maximum width of the irradiated field on the surface of the patient's skin, the distance that is achieved between the focus and the patient's skin, as well as the protective power of the tube. The protective power of the tube against parasitic radiation must be at least 0.30 mm lead.

Article 38

The size of the irradiated field at the contact of the tube with the patient's skin, X-ray machines used for intraoral imaging of teeth, should not exceed 60 mm in diameter for a circular field, or not more than 30x40 mm for a rectangular field.

Article 39

In the case of X-ray machines used for panoramic imaging of the jaw, the radiation beam transmission slot on the housing, as well as the movable mechanisms and cassette holders, must be adjusted in such a way that the size of the irradiated field does not exceed the edges of the cassette by more than 10 mm.

Article 40

In the case of radiators used for imaging patients, there must be a device to limit the size of the irradiated field as well as a light visor.

Article 41

X-ray machines used for the enlightenment of patients, which do not have an image intensifier or TV chain, must have a screen protected by leaded glass, an apron underneath, and, on the left side of the screen, and if the X-ray machine is used in a folded position, it must also have an apron on the side on which the operator is located.

The shielding power of the screen in the case of X-ray machines referred to in paragraph 1 of this Article shall be at least 1.8 mm lead at a nominal voltage of less than 75 kV, and at voltages from 75 kV to 100 kV it shall be at least 2 mm lead. The shielding power of the screen at voltages greater than 100 kV shall be increased by at least 0,01 mm lead for each kV.

Article 42

When illuminating with mobile X-ray machines, an image intensifier must be used, and additional tubes must be placed on the radiator of the apparatus to limit the radiation beam.

Article 43

The protective apron to be placed under the screen must be the same width or wider than the screen and at least 40 cm long. The apron must be composed of at least three parts that must overlap by at least 1 cm.

The protective apron to be placed on the side of the screen and the X-ray machine, when the machine is used in the folded position, must be made of one piece.

The protective power of the protective apron referred to in paragraph 1 of this Article shall be at least 0.25 mm lead for high-voltage X-ray tubes up to 75 kV, and at least 0.5 mm lead for high voltages from 75 to 125 kV.

The protective power of the protective apron to be placed on the left side of the targeted imaging device and on the side of the X-ray machine shall not be less than 0.5 mm lead.

Article 44

Users of dental X-ray machines shall be obliged to replace existing tubes that do not provide protection against parasitic radiation with appropriate tubes referred to in Article 37 of this Regulation within one year from the date of entry into force of this Regulation.

Article 45

Dental X-ray machines with a high X-ray tube voltage of less than 50 kV cannot be used for intraoral dental imaging.

Users are obliged to stop using the X-ray machines referred to in paragraph 1 of this Article within one year from the date of entry into force of this Rulebook.

Article 46

The circuit breaker of the electric current supplying the ionizing radiation generator must be easily accessible to the person working with the X-ray machine or accelerator.

Article 47

High-voltage lines and other electrical conductors to the appropriate parts of the stationary X-ray machine must be routed through special channels in the floor, but in such a way that the ducts do not affect the protective power of the floor in relation to the rooms located below the X-ray machine.

Article 48

The floor of the room in which the X-ray machine is used or some part of it must be made of electrical insulation material (rubber, vinyl, linoleum, etc.).

The provision of paragraph 1 of this Article does not apply to mobile X-ray machines.

Article 49

Leakage radiation under load conditions and in a state of unload for all types of radiators must comply with the applicable standards, which is determined by an authorized legal entity by measurement carried out at least once a year.

The manufacturer of the radiator shall enclose to the end user of the X-ray machine, in addition to other documentation on the X-ray machine, a diagram of the leaking radiation of the radiator.

The requirements of paragraph 1 of this Article must also be met by radiation constriction tubes and apertures.

Article 50

Vents and aperture vents must meet the requirements prescribed by the current standard in terms of filtration.

Article 51

The protection of operators and personnel from parasitic radiation must be covered by protective measures, namely: distance protection, command from protected zones, definition of significant containment zones, application of protective equipment, limitation of radiation levels at points of involvement, etc., in accordance with the applicable standard.

Article 52

X-ray machines for industrial radiography must be installed in at least two rooms. In one room, an X-ray tube and a table for testing materials with a device for automatic movement of the object to be ventilated are placed, and in the other room, the control table and other parts of the apparatus are placed.

A window protected by lead glass shall be installed in the wall between the rooms referred to in paragraph 1 of this Article or the control of operation shall be carried out by closed-circuit television.

Exceptionally, X-ray machines referred to in paragraph 1 of this Article may also be used in production halls. The operating conditions of these X-ray machines must be determined by the legal entity authorized to perform the design of protection against ionizing radiation.

Article 53

X-ray machines for the inspection of goods, letters, luggage and personal effects (hereinafter referred to as 'X-ray machines for the inspection of goods') which are located in public places must be fitted with a protective enclosure. At a distance of 10 cm from any point on the outer surface of the housing, an equivalent radiation dose of more than 1 mSv/h shall not be recorded if the X-ray emission is carried out in continuous mode, or 1 mSv/imp if the X-ray emission is carried out in pulsed mode.

Article 54

If there is a door on the protective enclosure through which the items to be inspected are entered, it must be provided with microswitches that prevent the high-voltage X-ray tube from being switched on while the door is open.

Article 55

If there are lead rubber curtains at the entrance to the ventilation tunnel of the X-ray apparatus referred to in Article 53 of this Regulation, the dimensions of which are more than 100×50 cm, and if the inlet is at a level lower than 50 cm, there shall be a button on the operator's control table from which the entrance can be seen. If the entrance to the ventilation tunnel is not visible from the operator's position, then this button must be placed at the entrance to the ventilation.

Article 56

If the conditions laid down in Article 53 of this Regulation are not met, the X-ray machines for the inspection of goods shall be placed in a separate room, the door of which shall bear the marking: "RADIATION HAZARD", and on the surface of the outer walls of such a room the intensity of the equivalent dose of radiation shall not exceed the value which may cause the prescribed limit of the effective dose to be exceeded for an individual of the population.

The intensity of the equivalent radiation dose on the external surfaces of these apparatus must not be greater than a value which may cause the prescribed limit of the effective dose to be exceeded for professionally exposed persons.

Article 59

Portable X-ray apparatus for the inspection of goods without a protective chamber may be used if the prescribed technical conditions are met and if appropriate radiation protection measures prescribed for closed sources of ionizing radiation have been taken. In the absence of the warning measures referred to in Article 16, measures shall be taken to prevent persons who do not work with sources of ionizing radiation from entering the radiation zone.

Article 60

The switching on and off of a portable X-ray apparatus for the inspection of goods must be so carried out that the person operating the apparatus is not exposed to higher doses of radiation than those prescribed for professionally exposed persons.

Article 61

Users of mobile x-ray machines for goods inspection are required to have an adequate, correct and verified radiation monitor.

Article 62

Goods inspection X-ray machines installed in a vehicle or mobile trailer shall not, within a distance of 10 cm from any point on the outer surface of the vehicle or trailer, produce an equivalent radiation dose of more than 1 mSv/h if irradiation is carried out in continuous mode, or 1 mSv/imp if irradiation is carried out in pulsed mode.

If the conditions referred to in paragraph 1 of this Article are not met, the protective measures prescribed for portable X-ray machines shall be taken.

If there is a door on the vehicle or trailer through which the items to be inspected are entered, it must be equipped with microswitches that prevent the high-voltage X-ray tube from being switched on while the door is open.

If there is a special cab in the vehicle or trailer for the operator's work, they shall not be exposed during operation to higher doses of radiation than those prescribed for professionally exposed persons.

Article 63

Inspection of vehicles, containers and other objects with X-ray tubes and accelerators can be carried out in facilities that have been built for this purpose according to the prescribed technical conditions. A complete control system must be installed in at least two rooms. The control panel and the necessary systems for carrying out the control process must be located in a separate room.

At the point of entry and exit to the area where the control is carried out, there must be a protective door equipped with protective switches that prevent the activation of X-ray radiation while the door is open.

On the surfaces of the external walls of the rooms in which the device referred to in paragraph 1 of this Article is located, the limit of the effective radiation dose prescribed for an individual member of the population must not be exceeded.

VI. IONIZING SMOKE DETECTORS AND RADIOACTIVE LIGHTNING RODS Article 64

Ionizing smoke detectors can be equipped with sources of ionizing radiation whose activity is less than 185 kBq and for which, in a single wipe, it has been established that, in a single wipe, the wiping of radioactive material from the substrate of the carrier does not exceed 0.5% of the total activity of the radiation source.

Ionization smoke detectors cannot be used with radiation sources that are in a gaseous state or have descendants in a gaseous state.

The intensity of the equivalent radiation dose measured at 10 cm from any point on the outer surface of the ionization smoke detector cartridge shall not exceed 1.0 mSv/h.

Article 65

Cleaning of radiation sources used in the ionization smoke detector and their maintenance is carried out in the manner and by means prescribed in the technical documentation.

Ionizing smoke detectors that are not in use must be stored in a locked place with protection measures provided against ionizing radiation.

The person responsible for the installation and storage of ionizing smoke detectors is the person in charge of implementing measures of protection against ionizing radiation.

Article 66

The user of ionization smoke detectors, in the event of their disappearance or in the event of fire or other natural disasters, is obliged to inform the Federal Ministry of Labor, Health and Social Policy and the authorized legal entity that performs dosimetric control.

Article 67

The removal of radioactive lightning rods can only be carried out by a legal entity authorized for the collection and disposal of radioactive waste material.

After the removal of the radioactive lightning rod, the authorized legal entity referred to in paragraph 1 of this Article shall be obliged to issue a certificate to the user that the radiation source has been properly stored and to inform the Federal Ministry of Labor, Health and Social Policy and the authorized legal entity under whose dosimetry control the source was.

The transport of radioactive lightning rods is carried out by a special vehicle. During transport, the source of radiation must be in a shipping container.

VII. SOURCES OF IONIZING RADIATION IN MASS USE Article 68

In radioactive luminous dyes, only tritium, ^3H , and promethium, ^{147}Pm may be used as components and must be chemically or otherwise bonded so that they constitute an insoluble or slightly soluble material.

Article 69

The total activity of radioactive luminous paint applied to the dials and hands of clocks and instruments shall not exceed the following values:

Article 70

Radioactive luminous paints on coated surfaces, under normal conditions of use, must adhere in such a way that they do not come off under earthquake or temperature changes.

Article 71

Watches and other instruments whose parts have been coated with radioactive luminous dyes should be placed in boxes with a transparent lid. The box and lid must be resistant to shocks and shocks under normal conditions of use and minor accidents.

Article 72

Special watches and instruments containing radioactive luminous dyes must bear a radioactivity mark on the dial to warn the user or the person repairing them that they contain radionuclides.

Article 73

When working with radioactive luminous dyes, the same protective measures are taken and implemented as when working with the appropriate types and activities of radionuclides.

Article 74

Legal entities and entrepreneurs engaged in the production, trade or import of cathode ray tubes for color TV receivers and TV monitors should provide the end user with a certificate of quality and protection against ionizing radiation.

Article 75

In the case of colour televisions or TV monitors, the equivalent dose strength at 5 cm from the surface of the cathode ray tube shall not exceed 5 mSv/h.

VII. FINAL PROVISIONS**Article 76**

Upon the entry into force of this Book of Rules, the Regulation on the placing on the market and use of radioactive substances above a certain limit of activity, X-ray machines and other apparatus that produce ionizing radiation and on measures of radiation protection of these sources ("Official Gazette of the SFRY", No. 40/86 and 45/89) shall cease to be valid.

Article 77

This Book of Rules shall enter into force on the eighth day following its publication in the Official Gazette of the FRY.