

15 Annex - Energy

**93. DECISION ON THE RECORDS OF IONISING RADIATION
SOURCES AND IRRADIATION OF THE POPULATION,
PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO
IONISING RADIATION**

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DECISION

ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

(Official Gazette of the Federal Republic of Yugoslavia 45/97)

I BASIC PROVISION

1. This Decision shall stipulate data to be contained in records of ionising radiation sources and irradiation of the population, patients and persons professionally exposed to ionising radiation.

II RECORDS OF IONISING RADIATION SOURCES

2. Depending on the type and purpose of an ionising radiation source, records of ionising radiation sources and irradiation of the population shall contain the following data in regard to

a) Diagnostic generators of Roentgen radiation

- 1) name of a generator and accompanying devices;
- 2) name and registered office of the manufacturer;
- 3) type and serial number of a generator, i.e. x-ray tube;
- 4) number and date of issuing of a procurement order, i.e. decision on use;
- 5) number and date of an attestation certificate;
- 6) type and purpose of a generator;
- 7) type of tubus;
- 8) mode of operation (illuminating, imaging);
- 9) nominal high voltage of an x-ray tube and anodal current;
- 10) generator junction;
- 11) filtration;
- 12) repeatability of the time of imaging, high voltage and equivalent dose;
- 13) position of a referent axis;
- 14) type of image receiver;
- 15) modification made to a device (malfunctions, repairs, servicing, tube replacements);
- 16) dates and reasons of putting a generator out of use;

b) radiotherapy generators of ionising radiation

- 1) name and type of a generator;
- 2) name and registered office of the manufacturer;
- 3) number and date of issuing of a procurement order, i.e. decision on use;
- 4) number and date of an attestation certificate;
- 5) type and serial number of a generator;
- 6) purpose of a generator;
- 7) radiation type and energy, i.e. maximum voltage and anodal current;
- 8) modifications made to a device (malfunctions, servicing, maintenance);

93. DECISION ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

- 9) dates and reasons of putting a generator out of use;
- c) closed sources of ionising radiation used in radiotherapy
 - 1) name and purpose of ionising radiation sources;
 - 2) name and registered office of the manufacturer;
 - 3) date of production, delivery, commencement and cessation of use;
 - 4) activity of a radiation source in the moment of production, procurement, commencement and cessation of use;
 - 5) number and date of issuing of a procurement order, i.e. decision on use of sources;
 - 6) date and place of storage;
- d) radiopharmaceuticals
 - 1) name and purpose of radiopharmaceuticals;
 - 2) name of a radioisotope in a radiopharmaceutical;
 - 3) name and registered office of the manufacturer, i.e. supplier;
 - 4) date of production, delivery, i.e. commencement of use;
 - 5) activity of a radiopharmaceutical in the moment of production, delivery, i.e. commencement of use;
 - 6) name and activity of a radiopharmaceutical at the moment of cessation of use;
 - 7) date and place of storage;
- e) generators of ionising radiation used for non-medical purposes
 - 1) name and type of a generator;
 - 2) name and registered office of the manufacturer;
 - 3) type and serial number of a generator, i.e. x-ray tube;
 - 4) number and date of issuing of a procurement order, i.e. decision on use;
 - 5) number and date of an attestation certificate;
 - 6) designed purpose of a generator;
 - 7) radiation type and energy, i.e. maximum voltage and anodal current;
 - 8) modification made to a device (malfunctions, servicing, maintenance);
 - 9) dates and reasons of putting a generator out of use;
- f) closed sources of ionising radiation used for non-medical purposes
 - 1) name and designed purpose of ionising radiation sources;
 - 2) name and registered office of the manufacturer;
 - 3) date of production, delivery, commencement and cessation of use;
 - 4) activity of a radiation source at the moment of production, procurement, commencement and cessation of use;
 - 5) number and date of issuing of a procurement order, i.e. decision on use of sources;
 - 6) date and place of storage;
- g) open sources of ionising radiation used for non-medical purposes
 - 1) name and designed purpose of ionising radiation sources;
 - 2) name and registered office of the manufacturer;

93. DECISION ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

- 3) date of production, delivery, commencement and cessation of use;
 - 4) activity of radiation sources in the moment of production, procurement, commencement and cessation of use;
 - 5) number and date of issuing of a procurement order, i.e. decision on use of sources;
 - 6) date and place of storage;
- h) ionising radiation sources in radioactive lightning conductor
- 1) name and type of the source;
 - 2) date and activity at the moment of installation;
 - 3) name and registered office of the manufacturer;
 - 4) name and address of the facility where lightning conductor is located;
 - 5) height of the supporting pole;
 - 6) date of removal of the ionising radiation source from a lightning conductor;
 - 7) name of the legal entity that performed removal of the source;
 - 8) date and place of storage of the source;
- i) ionising fire alarms (smoke detectors)
- 1) name and type of the alarm;
 - 2) name and activity of the source;
 - 3) name and registered office of the manufacturer;
 - 4) name and address of a facility where the detector is located;
 - 5) installing location (ceiling, floor);
 - 6) installation date and name of the legal entity that performed installation;
 - 7) de-installation date and place of storage of the detector;
- j) nuclear facilities
- 1) name and type of a nuclear facility;
 - 2) name and registered office of the nuclear facility user;
 - 3) reactor type;
 - 4) name and registered office of the manufacturer;
 - 5) thermal power;
 - 6) number, date and name of the body that issued the approval for the site, construction, trial run, commissioning, use and permanent shutdown of a nuclear facility;
 - 7) amount and category of the radioactive waste materials;
 - 8) amount and type of the nuclear material;
 - 9) date and cause of extraordinary emission and total emitted activity of effluents.
3. Apart from the data referred to in item 2 hereof, records of ionising radiation sources shall also contain the following data:
- 1) name and registered office of the user of the ionising radiation source (address, phone and fax numbers);
 - 2) date of dosimetric control of the ionising radiation source and name of the legal entity that performed dosimetric control;

93. DECISION ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

- 3) date and results of the performed device quality control;
- 4) type and serial number of the ionising radiation monitor;
- 5) date of calibration, i.e. verification of the monitor;
- 6) date and type of accidents at work with ionising radiation sources and remediation methods;
- 7) location of the facility, i.e. room where ionising radiation source is placed;
- 8) size of the room where ionising radiation source is placed and method of its ventilation;
- 9) list of protective means for work with ionising radiation sources;
- 10) list of persons who work with ionising radiation sources;
- 11) name of the person responsible for implementation of measures for protection against ionising radiation;
- 12) name and registered office of the legal entity that performs servicing, i.e. maintenance of the ionising radiation source.

III RECORDS OF IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

4. Records of irradiation of the population shall contain the following data:

- 1) name of the place where measurement occurred;
- 2) intensity of the absorbed dose of gamma radiation in the air (minimum, maximum, average);
- 3) absorbed dose of gamma radiation in the air;
- 4) activity of artificial radionuclides in the air;
- 5) activity of artificial radionuclides in solid and liquid precipitation;
- 6) activity of artificial radionuclides in the soil;
- 7) activity of artificial radionuclides in rivers, lakes and the sea;
- 8) activity of artificial radionuclides in foodstuffs, potable water and items of general use;
- 9) activity of artificial radionuclides in livestock feedstuffs;
- 10) activity of radionuclides in building materials;
- 11) activity of radionuclides in dwelling premises;
- 12) estimated effective dose for the population.

5. Records of irradiation of patients shall contain the following data:

- 1) name and registered office of the user of an ionising radiation source;
- 2) full name, gender and occupation;
- 3) day, month and year of birth;
- 4) unique citizen registration number;
- 5) record reference number;
- 6) city and address of residence;
- 7) date of examination, i.e. start and end dates of the therapy procedure.

Apart from the data referred to in the paragraph 1 hereof, the records of irradiation of patients, depending on the type of the medical procedure, shall also contain the following data:

- a) radiological diagnostics

93. DECISION ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO IONISING RADIATION

- 1) name of diagnostic procedure;
 - 2) mean value of effective dose for diagnostic procedure;
 - 3) deviation of effective dose from the mean value;
- b) radiotherapy
- 1) type of disease;
 - 2) radiation type and beam energy;
 - 3) mean value of equivalent dose in a treated organ;
 - 4) deviation from the mean value of equivalent dose.
- c) nuclear medicine
- 1) name of radionuclide, i.e. radiopharmaceutical;
 - 2) name of diagnostic, i.e. therapy procedure;
 - 3) mean value of the entered activity during diagnostic or therapy procedure;
 - 4) deviation from the mean value of the entered activity;
 - 5) mean value of effective dose during diagnostic or therapy procedure.
6. Records of irradiation of persons professionally exposed to ionising radiation (professionally exposed persons) shall contain the following data:
- 1) name and registered office of the user of an ionising radiation source;
 - 2) persons' full name and gender;
 - 3) day, month and year of birth;
 - 4) unique citizen registration number;
 - 5) professional qualifications and work position;
 - 6) years worked in a radiation zone;
 - 7) name and type of the ionising radiation source that the person is exposed to;
 - 8) degree of exposure to ionising radiation at work;
 - 9) medical examination date and assessment of health condition;
 - 10) effective dose of external exposure for the envisaged period;
 - 11) effective dose of internal exposure for the envisaged period;
 - 12) total effective dose of external and internal exposure for the envisaged period;
 - 13) results of bio-dosimetric measurements;
 - 14) total effective dose during planned extraordinary exposure;
 - 15) total effective dose during an emergency event.

IV FINAL PROVISIONS

7. The Rulebook on the method for keeping records of ionising radiation sources and irradiation of the population and persons professionally exposed to ionising radiation (Official Gazette of the Federal Republic of Yugoslavia 40/86) shall be repealed on the day of entry into force of this Decision.

8. This Decision shall enter into force on the thirtieth day following that of its publication in the Official Gazette of the Federal Republic of Yugoslavia.

93. DECISION ON THE RECORDS OF IONISING RADIATION SOURCES AND IRRADIATION
OF THE POPULATION, PATIENTS AND PERSONS PROFESSIONALLY EXPOSED TO
IONISING RADIATION
