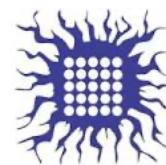




ID#14 Safety plan as a mandatory document for obtaining a license to perform radiation activities



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1. Introduction

The Law on Radiation and Nuclear Safety and Security of the Republic of Serbia regulate activities of radiation and nuclear safety and security, conditions for performing activities with radiation sources, acting in the situation of planned, existing, and emergency exposure to ionizing radiation to protect individuals, population and environment from the harmful effects of ionizing radiation.

The Radiation Unit in the Vinča Institute, Belgrade – Serbia, provides commercial services to industry mainly in the fields of sterilization of medical devices, food irradiation, and modification of polymer insulators. The facility has a maximum capacity of 25.000 m³ irradiated products per year. The facility core is cobalt-60 gamma irradiator with wet storage working in batch mode. The current activity of the source is around 100 kCi. The facility is designed for the maximum activity of 1MCI.

Radiation activities performed in the Radiation Unit are industrial sterilization and conservation, and scientific research. The Radiation Unit must have licenses to perform both of these radiation activities. This license is issued by the Serbian Radiation and Nuclear Safety and Security Directorate.

2. License

A license is a written act issued by the Directorate for the Performance of Moderate and High Risk Radiation Activities and Nuclear Activities in accordance with the conditions prescribed by that document

The Directorate makes a decision on issuing a license for performing high-risk radiation activities when it determines that all the prescribed conditions have been met. The applicant for performing high-risk radiation activities is obliged to establish, maintain and implement an integrated management system. The license for performing high-risk radiation activities is valid for five years.

In addition to the license for performing high-risk radiation activities, the Directorate also makes a decision on the use of radiation sources.

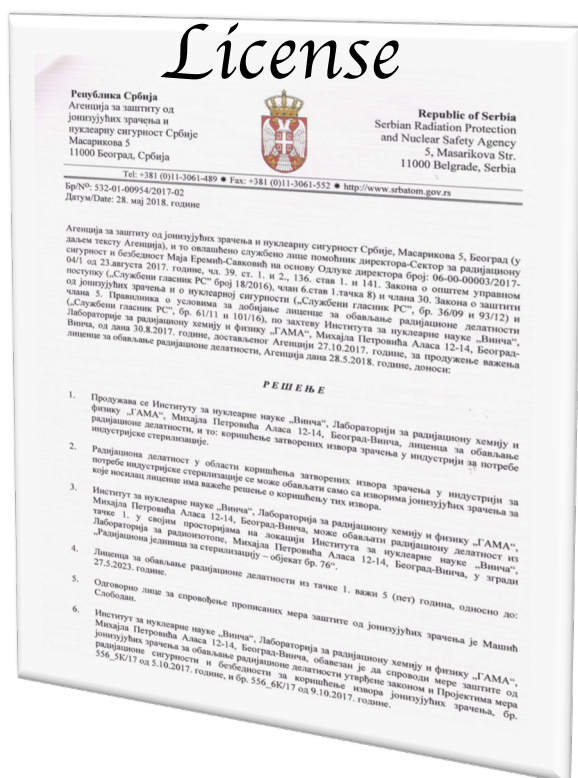


Fig 1. Appearance of the License for performing high-risk radiation activities in Republic of Serbia

3. Safety plan

One of the necessary documents for obtaining a license is the Safety plan. The security plan is a confidential document in accordance with the law governing the confidentiality of data.

The Licensee is obliged to regularly and continuously improve the Safety Plan in accordance with all changes, so that the Plan always reflects the current state of the plant and activities.

The Licensee is obliged to ensure the compliance of the Security Plan with the Basic Security Threat Assessment.

In the event of a change in the current security assessment, the licensee is obliged to, as soon as possible, make changes to the physical and technical protection system and the Security Plan in accordance with the recommendations of the competent security authorities and with their consent.

STRUCTURE OF SAFETY PLAN



Description of security rates;



Project of the system of physical and technical protection;



Description of the area, plant, and other facilities in the area and the protected material with the attached categorization of materials;



List of internal documents related to security;



Persons responsible for security;



Action plan in case of a security event;



Manner and plan for evaluating the efficiency of the security system.

Fig 2. Required structure of Safety plan

4. Conclusions and Acknowledgements

The safety plan is a necessary document describing radiation and nuclear safety measures. It must be maintained, reviewed, and improved in accordance with all changes, so that the Plan always reflects the current state of the irradiation facility and its activities.

The authors are grateful to the IAEA for their financial support and assistance, as well as to the Ministry of Education, Science and Technological Development of the Republic of Serbia