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Item 640

REGULATION OF THE COUNCIL OF MINISTERS

of 5 March 2021

on radiation protection officers1

Based on art. 7¹ para 11 of the Act of 29 November 2000 - Atomic Law (Dz. U. 2021 item 623), it is ordered as follows:

§ 1. The regulation shall define:

- the types of radiation protection officer authorization mentioned in art. 7 paragraph 3 of the Act of 29 November 2000 - Atomic Law, hereinafter: the 'radiation protection officer authorization', the kinds of activity whose supervision is allowed by it, and the detailed conditions for granting a radiation protection officer authorization;
- 2) the manner of conducting and determining the results of examinations for individuals applying for a radiation protection officer authorization, hereinafter: the 'examination'; the examination fee, the organization of work of the examining committees of examination boards, and the remuneration of the members of these boards for participation in an examining committee;
- 3) the scopes and forms of organizing trainings for individuals applying for a radiation protection officer authorization, hereinafter: the 'trainings';
- 4) the contents of an application for a radiation protection officer authorization, along with a list of documents attached to the application.
- § 2. 1. The types of radiation protection officer authorization, the kinds of activity whose supervision is allowed by it, and the detailed conditions for granting a radiation protection officer authorization of a specific type shall be established in appendix no. 1 to the regulation.
 - 2. The scopes of trainings shall be specified in appendix no. 2 to the regulation.
 - § 3. A training shall be conducted in the form of lectures, computational exercises, and laboratory exercises.
 - § 4. 1. An examining committee appointed to conduct an examination shall:
- 1) prepare examination questions, taking into account the scopes of the trainings mentioned in § 2 paragraph 2;

¹Within the scope of its regulation, the present regulation implements Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (Official Journal of the EU L 13 of 17 January 2014, p. 1, Official Journal of the EU L 72 of 17 March 2016, p. 69, Official Journal of the EU L 152 of 11 June 2019, p. 128, and Official Journal of the EU L 324 of 13 December 2019, p. 80).

- 2) conduct the examination;
- 3) assess the written and oral part of the examination.
- 2. The examining committee shall make its decisions by a simple majority of votes. In the event of an equal number of votes, the vote of the examining committee's head shall be decisive.
 - 3. The examining committee shall prepare a report from the examination, which shall include:
- 1) description of the examining committee of a proper examination board;
- 2) the number of the report, and the date of their preparation;
- 3) the full name and the identification number in the Universal Electronic System for Registration of the Population (the PESEL number), and in the case of a person without a PESEL number—the series, number, and name of a document confirming the identity of the examinee;
- 4) the content of the computational questions or problems in the written part of the examination, and the result of the written part of the examination;
- 5) the content of the questions in the oral part of the examination, and the number of points received by the examinee for answering each question;
- 6) information about the positive or negative result of the examination;
- 7) the full names and signatures of the head of the examining committee, and the remaining members of this committee.
 - § 5. 1. The written part of the examination lasts 120 minutes.
 - 2. For the written part of the examination, the examining committee shall award:
- 1) 1 point for each correct answer to a test question;
- 2) from 0 to 10 points for each computational question or problem.
- 3. The oral part of the examination is taken upon receiving at least 40 points from the written part of the examination, including at least 20 points from the test and at least 20 points from the computational questions or problems.
 - 4. In the oral part of the examination, 0 to 5 points are awarded for answering each question.
 - 5. The result of an examination is positive if at least 15 points are awarded for the oral part of the examination.
- 6. The examination board shall issue a certificate of passing the examination, signed by the head of the examining committee, to a person who has passed the examination.
 - § 6. The examination fee is 400 zlotys.
- § 7. The remuneration of the member of the examination board participating in the examining committee conducting the examination shall amount to 30 zlotys per each examinee.
- § 8. 1. An application to the President of the National Atomic Energy Agency for granting a radiation protection officer authorization shall include:
- the full name and the PESEL number, and in the case of a person without a PESEL number—the series, number, and name of a document confirming the identity of the person applying for a radiation protection officer authorization;
- 2) indication of the type of the radiation protection officer authorization which is being applied for;
- 3) a correspondence address;
- 4) information about the length of employment under the conditions of exposure of the person applying for a radiation protection officer authorization.
- 2. The person submitting the application mentioned in paragraph 1 shall attach to it the following documents referring to the person applying for a radiation protection officer authorization:
- 1) a document which confirms passing the examination;
- 2) a medical statement of the absence of contraindications to work under the conditions of exposure, as mentioned in

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- art. 7 paragraph 6 point 4 of the Act of 29 November 2000 Atomic Law;
- 3) certified copies of diplomas or certificates confirming the required education;
- 4) documents confirming the required length of employment under the conditions of exposure;
- 5) a declaration of full capacity to perform acts in law.
- 3. The people permitted to take an examination without the necessity to complete training shall not attach to the application mentioned in paragraph 1 the documents which had been attached to an application for examination permission.
- 4. The people submitting the application mentioned in paragraph 1, who had the radiation protection officer authorization on the day of submitting an application for examination permission without the necessity to complete training, and are applying for a radiation protection officer authorization of the same type, shall not attach the documents listed in paragraph 2 points 3 and 4.
- § 9. 1. The existing provisions shall apply to trainings for the people applying for a radiation protection officer authorization mentioned in art. 7 paragraph 3 of the Act of 29 November 2000 Atomic Law, started before the date of entry into force of the regulation.
- 2. The existing provisions shall apply to the applications for a radiation protection officer authorization mentioned in art. 7 paragraph 3 of the Act of 29 November 2000 Atomic Law, submitted and unresolved before the date of entry into force of the regulation.
 - § 10. The regulation shall enter into force 30 days after its promulgation.²

Prime Minister: M. Morawiecki

²The present regulation was preceded by regulation of the Council of Ministers of 2 September 2016 on a job position of particular significance for ensuring nuclear safety and radiation protection, as well as on radiation protection officers (Dz. U. item 1513), which shall be repealed on the date of entry into force of the present regulation in accordance with art. 37 paragraph 1 point 1 of the Act of 13 June 2019 amending the Act - Atomic Law and the Act on Fire Protection (Dz. U. item 1593, and 2020 item 284).

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Appendices to Regulation of the Council of Ministers of 5 March 2021 (item 640)

Appendix no. 1

THE TYPES OF RADIATION PROTECTION OFFICER AUTHOTIZATION, THE KINDS OF ACTIVITY WHOSE SUPERVISION IS ALLOWED BY IT, AND THE DETAILED CONDITIONS FOR GRANTING A RADIATION PROTECTION OFFICER AUTHORIZATION OF A SPECIFIC TYPE

No.	The type of the radiation protection officer authorization	The types of activity which the radiation protection officer becomes authorized to supervise	The length of employment under the conditions of exposure (in years)	
			secondary or secondary vocational education	higher education
1	2	3	4	5
1	IOR-1Z	Storing, transporting, trading, and using sealed radioactive sources, as well as installing, using and operating devices containing radioactive sources with an activity lower than the P ₂ value mentioned in appendix no. 2 to the Act of 29 November 2000 - Atomic Law (Dz. U. 2021 r. item 623), excluding the use of radioactive sources for medical purposes.	1	0
2	IOR-1R	Commissioning and using devices generating ionising radiation for purposes other than medical, including commissioning laboratories meant to use them, including laboratories meant to use X-ray equipment.	1	0
3	IOR-1	Activities whose supervision is allowed for people holding a radiation protection officer authorization of the IOR-1Z and IOR-1R type. Producing, processing, storing, transporting or using nuclear materials, radioactive materials or radioactive sources, as well as trading these materials or sources, storing, transporting, processing or disposing of radioactive waste, except the use of radioactive sources for medical purposes and disposal, transporting or processing spent nuclear fuel. Operating or decommissioning a uranium ore mine. Producing, installing, using or operating devices containing radioactive sources, and trading these devices, excluding devices containing radioactive sources used for medical purposes. Commissioning a laboratory meant to use radioactive sources or devices containing such sources, excluding sources and devices used for medical purposes. Constructing, operating and closing radioactive waste repositories intended for disposal of spent nuclear fuel. Intentional addition of radioactive substances in the production process of general consumer products and medical products, medical products for in vitro diagnostics or active medical products for inplantation, within the meaning of the provisions of the Act of 20 May 2010 on medical products (Dz. U. 2020 item 186, as amended), trading these products or supplies, as well as import to the territory of the Republic of Poland and export from this territory of these products or	3	1

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		supplies, and general consumer products with added radioactive substances. Activation of material causing an increase in the radioactivity of a general consumer product, which cannot be neglected from the point of view of radiation protection when placing this product on the market.		
4	IOR-2	Activities whose supervision is allowed for people holding a radiation protection officer authorization of the IOR-1 type. Storing, transporting or processing spent nuclear fuel, trading this fuel, as well as isotope enrichment. Constructing, commissioning, operating, and decommissioning nuclear facilities. Constructing, operating, and closing radioactive waste repositories intended for disposal of spent nuclear fuel.	4	2
5	IOR-3	Activities whose supervision is allowed for people holding a radiation protection officer authorization of the IOR-1 type. The use of radioactive sources for medical purposes; producing, installing, using, and operating devices containing radioactive sources for medical purposes; trading these devices as well as activating and using devices generating ionising radiation for medical purposes, as well as commissioning a laboratory meant to use such sources and devices, excluding the activation or use of X-ray equipment in a medical X-ray laboratory, commissioning a medical X-ray laboratory, activating or using X-ray equipment for the purposes of X-ray diagnostics, interventional radiology, surface radiation therapy or radiation therapy of non-neoplastic diseases outside a laboratory. Intentional administration of radioactive substances to humans and animals for the purposes of medical or veterinary diagnostics, treatment or scientific research.	4	2

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Appendix no. 2

THE SCOPE OF TRAINING FOR PEOPLE APPLYING FOR A RADIATION PROTECTION OFFICER AUTHORIZATION

1. A radiation protection officer authorization of the IOR-1Z type

Subjects of lectures (at least 30 hours):

- 1) selected basic topics of atomic and nuclear physics; radioactive decay;
- 2) natural and artificial radioactive isotopes;
- 3) the effect of radiation on matter;
- 4) biological effects of ionising radiation;
- 5) ionising radiation detectors;
- 6) basic measures of ionising radiation dosimetry, units;
- 7) dosimetric instruments;
- 8) basic principles of radiation protection, including justification for, optimisation, and limitation of exposure;
- 9) a management system for the situations of radiation incidents; descriptions of known radiation incidents;
- 10) the provisions of the Act of 29 November 2000 Atomic Law and the implementing acts to this Act; basic international provisions for nuclear safety and radiation protection, including the provisions of the European Union;
- 11) licenses for exposure-related activity; registration of and notification about such activity, exempting activity from regulatory control, nuclear regulatory officer authorization;
- 12) principles for safe work with sealed radioactive sources in laboratories and outside laboratories;
- 13) measuring dose rates and radioactive contaminations;
- 14) controlling the exposure of employees and people from the general public, including to ionising radiation from natural sources;
- 15) monitoring and registry of sealed radioactive sources;
- 16) safeguarding of radioactive sources;
- 17) general information about handling radioactive waste;
- 18) basic principles for transporting class 7 dangerous goods;
- 19) organizing radiation protection in an organizational unit, duties and powers of the head of the unit, a radiation protection officer and employees, including outside workers;
- 20) preparing documents in an organizational unit: employee handbooks, working instructions, dose registers, source registers, emergency response plans, radioactive source security plans;
- 21) basic issues of labour law.

Computational exercises (at least 4 hours): calculating changes in radioactivity over time, calculating doses, calculations for shields, optimisation of working conditions under the conditions of exposure, assessment of individual doses based on dosimetric measurements in the work environment, estimation of time limits for staying in a room with elevated radiation.

Laboratory exercises (at least 4 hours): selecting the parameters of a dosimetric instrument, dose rate measurements, drawing isodoses, measuring radioactive contaminations.

2. A radiation protection officer authorization of the IOR-1R type

Subjects of lectures (at least 20 hours):

1) selected basic issues of atomic and nuclear physics;

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- 2) the effect of radiation on matter;
- 3) biological effects of ionising radiation;
- 4) ionising radiation detectors;
- 5) basic measures of ionising radiation dosimetry, units;
- 6) dosimetric instruments;
- 7) basic principles of radiation protection, including justification for, optimisation and limitation of exposure;
- 8) a management system for the situations of radiation incidents; descriptions of known radiation incidents;
- 9) the provisions of the Act of 29 November 2000 Atomic Law and the implementing acts to this Act, basic international provisions for nuclear safety and radiation protection, including the provisions of the European Union;
- 10) licenses for exposure-related activity, registration of and notification about such activity, exempting activities from regulatory control, nuclear regulatory officer authorization;
- 11) principles for safe work with devices generating ionising radiation in laboratories and outside laboratories;
- 12) dose rate measurements;
- 13) controlling the exposure of employees and people from the general public;
- 14) the basics of physics and technique of X-ray tubes and accelerators;
- 15) principles for safe work in X-ray laboratories and accelerator laboratories;
- organizing radiation protection in an organizational unit, duties and powers of the head of the unit, a radiation protection officer and employees, including outside workers;
- 17) preparing documents in an organizational unit: employee handbooks, working instructions, dose registries, plans of emergency proceedings;
- 18) basic issues of labour law.

Computational exercises (at least 3 hours): calculating doses, calculations for shields, optimisation of working conditions under the conditions of exposure, assessment of individual doses based on dosimetric measurements in the work environment, estimation of time limits for staying in a room with elevated radiation.

Laboratory exercises (at least 3 hours): selecting the parameters of a dosimetric instrument, measuring the X-ray spectrum, measuring the dose rate and measuring the dose, drawing isodoses.

3. A radiation protection officer authorization of the IOR-1 type

Subjects of lectures like in trainings for people applying for a radiation protection officer authorization of the IOR-1Z and IOR-1R types, and (at least 60 hours in total):

- 1) performing activity associated with exposure, including exposure to natural radiation, in particular to radon;
- 2) principles for safe work with open radioactive sources in laboratories and outside laboratories, release control, dose constraints (dose constraints);
- 3) principles for handling radioactive materials that do not constitute radioactive sources;
- 4) principles for dosimetric measurements in the work environment; establishing the borders of controlled or supervised areas;
- 5) assessing the exposure of people from the general public; the definition of reference groups;
- 6) internal exposure;
- 7) decontamination of working surfaces, equipment, personal contaminations;
- 8) identification of radioactive substances, including nuclear materials;
- 9) the handling of radioactive waste;

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- 10) radioactive waste repositories;
- 11) examples of typical applications of nuclear techniques, and the associated hazard.

Computational exercises like in training for people applying for a radiation protection officer authorization of the IOR-1Z type, and (at least 8 hours in total): calculations for shields, calculating the activity and concentration of radioactive isotopes in radioactive waste, assessing internal exposure, estimating a time limit for staying in an elevated radiation area, assessing doses for a reference group.

Laboratory exercises like in training for people applying for a radiation protection officer authorization of the IOR-1Z type, and (at least 8 hours in total): measuring the gamma radiation spectrum, measuring the neutron flux, measuring and assessing individual contaminations.

4. A radiation protection officer authorization of the IOR-2 type

Subjects of lectures like in training for people applying for a radiation protection officer authorization of the IOR-1 type, and (at least 84 hours in total):

- 1) the basics of fission reaction physics, reactor physics, and heat exchange in nuclear reactors;
- 2) the elements of physics and chemistry of a nuclear fuel cycle;
- 3) principles for safe management of radioactive waste and spent nuclear fuel;
- 4) radioactive waste repositories intended for disposal of spent nuclear fuel, and spent nuclear fuel repositories;
- 5) the sources of risk in a nuclear reactor originating from the reactor core, cooling circuits, water and air filtration systems, spent nuclear fuel, activated materials, and radioactive waste;
- 6) the issues of reactor dosimetry;
- 7) risk assessment in a nuclear facility and its surroundings (normal operation, predicted radiation incidents and emergency conditions);
- 8) potential accidents in nuclear facilities;
- 9) emergency response plans in selected nuclear facilities;
- 10) principles for physical protection and register of nuclear materials.

Computational exercises like in training for people applying for a radiation protection officer authorization of the IOR-1 type, and (at least 12 hours in total): estimating the activity of irradiated shielding material, estimating the multiplication factor of irradiated nuclear fuel.

Laboratory exercises like in training for people applying for a radiation protection officer authorization of the IOR-1 type, and (at least 12 hours in total): establishing warning and emergency thresholds in a system of safeguards.

5. A radiation protection officer authorization of the IOR-3 type

Subjects of lectures like in training for people applying for a radiation protection officer authorization of the IOR-1 type, and (at least 72 hours):

- 1) the basics of using ionising radiation in medical diagnostics and therapy; the types of procedures in teleradiotherapy, brachytherapy and nuclear medicine; typical hazards;
- 2) basic principles for radiation protection of patients;
- 3) the duties of radiation protection officers in health care units; principles for cooperation with the medical personnel;
- 4) description of known radiation emergencies in medical procedures using the sources of ionising radiation.

Computational exercises like in training for people applying for a radiation protection officer authorization of the IOR-1 type, and (at least 12 hours in total): calculating the dose rate, the shield dose, and the working time in typical radiation therapy laboratories; calculating the activity and concentrations of radioactive isotopes in radioactive waste for typical procedures of nuclear medicine.

Laboratory exercises like in training for people applying for a radiation protection officer authorization of the IOR-

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1 type.