

Pursuant to Article 16(1) of the Law on Radiation and Nuclear Safety in Bosnia and Herzegovina (Official Gazette of BiH 88/07) and Article 61(2) of the Law on Administration (Official Gazette of BiH 32/02 and 102/09), the director of the State Regulatory Agency for Radiation and Nuclear Safety issues the

## **REGULATION ON RADIATION PROTECTION OF OUTSIDE WORKERS**

### **PART ONE – GENERAL PROVISIONS**

#### **Article 1 (Subject)**

- (1) This regulation provides for the responsibility of the authorization holder and the employer of outside workers, either directly or through contractual agreements, for the operational aspects of the radiation protection of outside workers, and the responsibility of outside workers themselves.
- (2) This regulation provides for the responsibility of the authorization holder and the employer of outside workers, the layout, contents and uniformity requirements of the individual radiological monitoring document for the outside workers who perform activities outside the territory of Bosnia and Herzegovina.
- (3) This regulation applies to the Category A and Category B outside workers who work in a controlled and/or supervised area in Bosnia and Herzegovina, and also to the Category A or B outside workers from Bosnia and Herzegovina who perform similar job in other countries.

#### **Article 2 (Definitions)**

The terms used for the purpose of this regulation mean:

- a) *Work activities performed by outside workers:* A service or services provided by an outside worker in an authorization holder's controlled or supervised area.
- b) *Individual radiological monitoring document:* A document containing individual radiological monitoring data for an outside worker who performs job outside Bosnia and Herzegovina.
- c) *Exposed worker:* An individual occupationally exposed to ionizing radiation, either self-employed or working under an employer, who is subject to exposure at work carried out within a practice and liable to receive doses exceeding the dose limits for public exposure.
- d) *Monitoring:* The systematic measurement of dose or contamination levels related to an exposure or radioactive contamination, and the interpretation of the results.
- e) *Authorization holder:* A legal person responsible under the law for carrying out a practice involving ionizing radiation sources and for which an outside worker performs activities. The authorization holder can have a business address in or outside Bosnia and Herzegovina.
- f) *Employer of outside workers:* A legal person employing an outside worker and sending the outside worker to perform activities for an authorization holder.
- g) *Outside worker:* Any exposed worker, including apprentices and university students, who is not employed by the authorization holder responsible for controlled and supervised areas but performs activities in these areas. The outside worker may be an individual who performs activities in Bosnia and Herzegovina or in other countries.

## **PART TWO – RADIATION PROTECTION OF OUTSIDE WORKERS**

### **Chapter I. Equivalency and responsibilities**

#### **Article 3 (Equivalency)**

- (1) The system for individual radiological monitoring of outside workers must be designed so as to ensure equivalent protection of outside workers to that for exposed workers permanently employed by the authorization holder.
- (2) The system for individual radiological monitoring referred to in paragraph (1) is ensured by the State Regulatory Agency for Radiation and Nuclear Safety (hereinafter: Agency).
- (3) The effective dose limits for outside workers must be the same as the dose limits for exposed workers.

#### **Article 4 (Responsible parties)**

The responsible parties for the implementation of this regulation are:

- a) The holder of authorization for a practice involving ionizing radiation sources that engages an outside worker;
- b) The employer of outside workers (hereinafter: employer) sending the workers to perform work activities for an authorization holder; and
- c) The outside worker.

#### **Article 5 (Responsibilities of the authorization holder)**

- (1) The authorization holder may engage only the outside workers that are employed with an employer.
- (2) The authorization holder is either directly or through contractual agreements with the employer of outside workers responsible for the operational aspects of the radiation protection of outside workers that are directly related to the workers' activities for the authorization holder.
- (3) The authorization holder must:
  - (a) for category A workers entering controlled areas, check whether the outside worker has been medically examined and declared fit for the activities to be assigned to them;
  - (b) check whether the categorization of the outside worker is appropriate in relation to the doses liable to be received at work for the authorization holder;
  - (c) for entry into controlled areas, ensure that, in addition to the basic training in radiation protection the outside worker has received specific instructions and training in connection with the workplace and the conducted activities. The additional training refers to the radiation protection procedures and precautions connected with the operational and working conditions of both the practice in general and each type of work to which they may

be assigned and to the training in the relevant parts of the emergency radiation situations and procedures.

- (d) for entry into supervised areas, ensure that the outside worker has received working instructions appropriate to the radiological risk from the sources and the operations involved;
  - (e) ensure that the outside worker has been issued with enough personal protection items;
  - (f) ensure that the outside worker receives individual exposure monitoring appropriate to the nature of the activities, and any dosimetric monitoring that may be necessary;
  - (g) ensure compliance with the requirements of the radiation protection system, laid down in applicable regulations;
  - (h) for entry into controlled areas, ensure or take all appropriate steps to ensure that after every activity the radiological data from individual exposure monitoring of each category A outside worker must be recorded;
  - (i) for entry into supervised areas, ensure or take all appropriate steps to ensure that after every activity the radiological data from individual exposure monitoring of each category B outside worker must be recorded when such monitoring is required in accordance with applicable regulations.
- (4) In order to meet the responsibilities referred to in paragraph (3), the authorization holder must request an expert opinion from an expert in radiation protection in the relevant practice.
- (5) If an authorization holder with business address in Bosnia and Herzegovina wants to engage an employer with business address outside of Bosnia and Herzegovina, the employer must send radiological monitoring documents for outside workers to the authorization holder, issued by the regulatory body of the country of employer's registration.

#### Article 6 **(Provision of information)**

Before the start of outside worker's activity, the authorization holder must inform the Agency in writing:

- a) that all requirements for the operational aspects of the radiation protection of outside workers referred to in Article 5(3) are met;
- b) that all requirements referred to in Article 7 are met either directly or through contractual agreements with the employer.

#### Article 7 **(Responsibilities of the employer)**

- (1) The employer must ensure, either directly or through contractual agreements with the authorization holder, that the radiation protection of its workers is in accordance with the provisions of this Article, in particular by:
- (a) ensuring the compliance with the requirements of the radiation protection system, laid down in applicable regulations;
  - (b) informing the exposed workers about:
    - 1) the radiation health risks involved in their work,
    - 2) the general radiation protection procedures and precautions taken,

- 3) the importance of complying with the technical, medical and administrative requirements,
  - 4) the importance of making an early declaration of pregnancy in view of the risks of exposure for the unborn child,
  - 5) the importance of announcing the intention of breastfeeding in view of the risks of exposure for an infant after intake of radionuclides or bodily contamination.
- c) appropriate radiation protection training and information programs for exposed workers;
  - d) a guarantee that its workers are subject to an appropriate assessment of exposure through radiological monitoring of the workplace or individual monitoring, and for category A workers, medical surveillance also;
  - e) recording the radiological data from the individual exposure monitoring of each category A or B worker in the data system for individual radiological monitoring of outside workers.
- (2) In order to meet the obligations referred to in paragraph (1), the authorization holder must request a professional opinion from a radiation protection expert in the relevant practice.

Article 8  
**(Data on outside workers)**

- (1) Before the start of an activity for the authorization holder, the employer must send the required data on outside workers to the authorization holder.
- (2) The employer obtains the data referred to in paragraph (1) from the National Register of Individuals Exposed to Ionizing Radiation by submitting an appropriate written request to the Agency.
- (3) The data referred to in paragraph (1) are:
  - a) data on the worker's employment, which must contain:
    - 1) the employer's name, address, and unique registration number,
    - 2) the starting date of individual radiological monitoring, and where available, the end date,
    - 3) the categorization of the worker (A or B).
  - b) data on the medical surveillance of the outside worker, which must contain:
    - 1) the medical classification of the worker (fit; fit, subject to certain condition/s/ and a recommendation),
    - 2) information on restrictions on working with radiation,
    - 3) the date of the last medical examination,
    - 4) the period of validity of the result of the last medical examination.
  - c) data on the outside worker's individual exposure monitoring for the period of last five years, including the current year.
- (4) The authorization holder must submit the following data to the employer within 30 days from the date of ending an activity:
  - a) the period covered by the activity;

- b) an estimate of any effective dose received by the outside worker for the period covered by the activity;
  - c) in the event of non-uniform exposure, an estimate of the equivalent doses in the different parts of the body; and
  - d) in the event of an intake of radionuclides, an estimate of the intake or the committed effective dose.
- (5) The employer submits the data referred to in paragraph (3)d) to the Agency for the National Register of Individuals Exposed to Ionizing Radiation within seven days from receiving the data from the authorization holder.

Article 9  
**(Responsibility of outside workers)**

Outside workers must make their full contribution towards the protection to be afforded to them by the radiological monitoring system, without prejudice to the responsibilities of the authorization holder or the employer.

**Chapter II. Individual radiological monitoring document for outside workers**

Article 10  
**(Purpose of the individual radiological monitoring document)**

- (1) The individual radiological monitoring document for outside workers is an element of the data system for individual monitoring of outside workers.
- (2) The document referred to in paragraph (1) is issued upon request of the employer only for the outside workers who perform activities outside Bosnia and Herzegovina.
- (3) The document referred to in paragraph (1) allows the authorization holder to verify that an exposed worker was subject to the required medical surveillance and that the doses received by the worker did not exceed the dose limits.
- (4) The document referred to in paragraph (1) allows the submission of data on the radiation dose received by an outside worker for the National Register of Individuals Exposed to Ionizing Radiation.

Article 11  
**(Request submission)**

- (1) The employer must submit a written request to the Agency to obtain the individual radiological monitoring document for an outside worker before the worker begins to work for an authorization holder with business address outside Bosnia and Herzegovina.
- (2) The employer must send the following data on the outside worker to the Agency:
  - a) on the worker's identity, which must consist of:
    - 1) last name,
    - 2) first name,
    - 3) sex,

- 4) date of birth,
  - 5) nationality.
- b) on the medical surveillance of the worker, which must contain:
- 1) the medical classification of the worker (fit; fit, subject to certain condition/s/ and a recommendation),
  - 2) information on restrictions on working with radiation,
  - 3) the date of the last medical examination,
  - 4) the name of the authorized technical service for medical surveillance of exposed workers,
  - 5) the period of validity of the result of the last medical examination.
- c) on the employment of the worker, which must contain:
- 1) the name, address, phone and fax numbers, e-mail, and the employer's unique registration number,
  - 2) the starting date of individual radiological monitoring, and where available, the end date,
  - 3) the categorization of the worker (A or B).
- d) the results of the individual radiological monitoring of the exposed worker, which must contain:
- 1) the official dose record (year; effective dose in mSv; in the event of non-uniform exposure, equivalent doses in the different parts of the body in mSv; and in the event of an intake of radionuclides, the committed effective dose in mSv),
  - 2) the name of the authorized technical service for individual radiological monitoring which carried out the dose reading.
- e) the name of the radiation protection officer employed with the authorization holder and authorized to fill in the relevant data in the individual radiological monitoring document for outside workers.

#### Article 12

#### **(Issuance of the individual radiological monitoring document)**

- (1) On the basis of the submitted request, the Agency issues to the employer the individual radiological monitoring document for an outside worker by completing the first page of the document.
- (2) The outside worker may be issued with only one original individual radiological monitoring document.
- (3) The individual radiological monitoring document may not be used by any other person.
- (4) The outside worker may not begin to work for an authorization holder without an individual radiological monitoring document.
- (5) The content and layout of the individual radiological monitoring document for the outside worker are shown in Annex, which is an integral part of this regulation.

Article 13  
**(Obligations of the authorization holder)**

- (1) When the employer sends the individual radiological monitoring document for an outside worker, the authorization holder must:
  - a) familiarize itself with the data on the doses indicated in the document and assess whether the worker may perform the job; and
  - b) when the worker has finished a job, complete the second page of the document, inform the worker about the results of dose measurements and return the document to the employer.
- (2) The document referred to in paragraph (1) is to be completed and signed by the appointed radiation protection officer employed with the authorization holder.
- (3) The authorization holder sends the completed document referred to in paragraph (1) to the employer within seven days after determination of individual doses.

Article 14  
**(Obligations of the employer)**

- (1) The employer must send the completed individual radiological document to the Agency within 10 days from the date of completing outside worker's activities for the authorization holder whose business address is outside Bosnia and Herzegovina.
- (2) If a worker hasn't started to work within 30 days from the date of issuing the individual radiological monitoring document, the employer must immediately return the document to the Agency.
- (3) The received data on the dose received by the outside worker are further kept in the National Register of Exposed Individuals.

Article 15  
**(Administrative tax)**

The Agency collects an administrative tax for the issuance of individual radiological monitoring document, the amount of which is established in accordance with the valid decision of the Council of Ministers of BiH.

Article 16  
**(Responsibilities)**

A legal person that fails to comply with the provisions of this regulation will be sanctioned in accordance with laws and regulations.

**PART THREE – TRANSITIONAL AND FINAL PROVISIONS**

Article 17  
**(Harmonization of operations)**

The authorization holder and the employer of outside workers must harmonize their operations with the provisions of this regulation within six months from the date of publication of this regulation in the Official Gazette of BiH.

Article 18  
**(Entering into force)**

This regulation enters into force on the eighth day following the date of its publication in the Official Gazette of BiH.

No.:  
Date:

**DIRECTOR**  
Emir Dizdarević



**ANNEX: Individual radiological document for outside worker**

**STATE REGULATORY AGENCY FOR RADIATION  
AND NUCLEAR SAFETY**

Sarajevo, Hamdije Čemerlića 2, Bosnia and Herzegovina

Phone: 00387 33 726 300

Fax: 00387 33 726 301

**INDIVIDUAL RADIOLOGICAL DOCUMENT FOR OUTSIDE WORKER**

Date of issue:

No.:

**A. Completed by the Agency:**

<b>1.</b>	<b>Data on the outside worker</b>								
1.1.	Last name:								
1.2.	First name:								
1.3.	Other last names (nee):								
1.4.	Sex: male <input type="checkbox"/> female <input type="checkbox"/>								
1.5.	Date of birth (year, month, date):								
1.6.	Nationality:								
1.7.	Unique identification number (register):								
<b>2.</b>	<b>Health status</b>								
2.1.	Medical assessment: fit <input type="checkbox"/> fit subject to the following conditions(s) and a recommendation <input type="checkbox"/>								
2.2.	Technical service for medical surveillance of exposed workers:								
2.3.	Date of the last medical examination (year, month, day):								
2.4.	Validity period of the last medical examination (year, month, day):								
<b>3.</b>	<b>Data on the employer</b>								
3.1.	Name:								
3.2.	Address:								
3.3.	Unique identification number:								
3.4.	Phone no.:								
3.5.	Fax:								
3.6.	E-mail:								
<b>4.</b>	<b>Exposures before issuing the document – Registered doses of ionizing radiation in the past 5 (five) years</b>								
Year	4.1. Doses from external exposure (mSv)					4.2. Doses from internal exposure (mSv)			4.3. Effective dose, E, (mSv)
	Hp(10)	Hp(0.07)	Hp(3)	Hp(0.07) Extremities	Hp(10) Neutrons	Committed dose E(50)	Radio-nuclide	Radionuclide activity (Bq)	
Total									

**Director**

(stamp)

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**B. Exposure after issuing the document – Completed by the holder of authorization for a practice involving radiation sources with business address outside Bosnia and Herzegovina which engages an outside worker**

5. Data on the authorization holder that engages an outside worker									
5.1. Name:									
5.2. Address:									
5.3. Phone no.:									
5.4. Fax:									
5.5. E-mail:									
6. Data on the appointed radiation protection officer									
6.1. First name:									
6.2. Last name:									
6.3. Phone no.:									
6.4. Fax:									
6.5. E-mail:									
7. Data on the doses to outside worker:									
7.1 Outside worker's name:									
7.2 Authorized technical service for individual monitoring of exposed workers:									
Year	7.1. Doses from external exposure (mSv)					7.2. Doses from Internal exposure (mSv)			7.3. Effective dose, E, (mSv)
	Hp(10)	Hp(0.07)	Hp(3)	Hp(0.07) Extremities	Hp(10) Neutrons	Committed dose E(50)	Radio-nuclide	Radionuclide activity (Bq)	
Total									

*Note: Leave the field blank if the dose hasn't been measured.*

The radiation protection officer who has entered the requested data:

Name .....

Signature .....

**Director**

.....

.....

(signature)

(stamp)