# Resolution No558 of the Government of Georgia

December 15, 2016

Tbilisi

## Concerning the Approval of Technical Regulation on "Radiation Safety Requirements in Industry, Science, and Education"

**Article 1**

Pursuant to Article 53 paragraph 7c of the Law of Georgia on "Nuclear and Radiation Safety", article 6 of the Law of Georgia on the Structure, Authority and Rules of Operation of the Government of Georgia, and And Section 2 of Article 58 Product Safety and Free Movement Code, enclosed Technical Regulation on "Radiation Safety Requirements in Industry, Science, and Education shall be approved.

**Article 2**

The resolution shall come into effect on January 1, 2017.

G. Kvirikashvili

Prime Minister

## Technical Regulation on "Radiation Safety Requirements in Industry, Science, and Education

**Artticle 1. Scope and purpose of regulation**

1. Technical Regulation on "Radiation Safety Requirements in Industry, Science, and Education (hereafter "Regulation") establishes radiation safety requirements in industry, science and education, aiming at protecting humans and the environment from harmful exposure to ionizing radiation when performing activities related to sources of ionizing radiation and equipment/machinery containing such sources.

2. Requirements laid down in the Regulation are mandatory for individuals and legal entities working in the field of industry, science and education, and holding or seeking a license for nuclear and radiation activities.

**Article 2.** Definitions of Terms

Terms used in the Regulation shall have the same meaning as in active legislation of Georgian.

## Article 3. General Provisions

1. Activities related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education, and equipment are subject to authorization in accordance with the law of Georgia on "Nuclear and Radiation Safety" and law of Georgia on "License and permit".

2. During the activities related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education, should be ensured:

a) Protection of humans and environment from harmful exposure to ionizing radiation;

b) Adherence to basic norms and requirements of radiation safety;

c) Radiation monitoring;

d) physical protection of sources of ionizing radiation;

e) Preparedness and response to radiation accidents and/or incidents in the facility.

## Article 4. Functions of LEPL Agency of Nuclear and Radiation Safety

LEPL Agency of Nuclear and Radiation Safety (ANRS) - as a regulatory authority - for the purpose of regulation and control ensures:

a) Authorization of activities related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education in accordance with the Georgian legislation;

b) Planned and unplanned inspection according to the procedure established by the applicable legislation;

c) checking of radiation monitoring results;

d) Registration in Departmental Register of ionizing radiation sources and equipment/machinery containing such sources used in industry, science and education in the manner prescribed by the applicable legislation;

e) In the event of radiation accident and/or incident, ANRS ensures coordination and control of the persons involved in response actions and the liquidation activities;

f) Development of guidelines and recommendations for activities related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education.

## Article 5. Obligations of a physical or legal person carrying out the activity related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education

Physical or legal person carrying out the activity related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and

education shall:

a) Obtain authorization from the ANRS for the activities specified in this Regulation;

b) Inform ANRS about any changes related to the activity, or expansion of the activities and submit relevant documentation and revised program for radiation safety related to the changes;

c) Submit to ANRS reports on fulfillment of License Conditions once a year - from April 1 to May 1, except for the cases, when it obtains a license within 6 months before the start of the reporting period;

d) Ensure registration of sources of ionizing radiation and carry out inventory in accordance with the established legislation;

e) Submit to ANRS the information about the source of the ionizing radiation within 10 days after its receipt or handover, in accordance with the procedure established by the applicable legislation;

f) Grant the right to carry out activities related to ionizing radiation sources and equipment/machinery containing such sources to a qualified employee;

g) Provide periodic training for the employee;

h) Appoint person(s) responsible for radiation safety;

i) provide the employee with Radiation protection products;

j) Provide relevant instructions before beginning operation;

k) Draw up and periodically update a monitoring program;

l) equip the employee with individual dosimeters and maintain appropriate documentation;

m) Inform ANRS about the exceeding of individual Permissible Dose Limits;

n) Ensure workplace monitoring and include the monitoring data in the documents in accordance with the legislation;

o) Develop specific working conditions taking into account the category of the source of ionizing radiation, possible risk, and type of activities;

p) Organize safe transportation of sources of ionizing radiation;

q) Ensure storage of ionizing radiation sources in a designated temporary areas, in compliance with the requirements set out in safety legislation;

r) Return the exhausted radioactive source to the producer, or provide a safe storage or burial of radioactive waste;

s) Organize physical protection of ionizing radiation sources in accordance with Georgian legislation;

t) Ensure proper operation of physical protection systems of ionizing radiation sources;

u) Develop periodically updatable preparedness and response plan for radiation accidents and/or incidents based on hazard and risks analysis;

v) Determine measures to prevent radiation accident and/or incident at the facility;

w) In the event of radiation accident and/or incident at radiation facility, act in accordance with preparedness and response plan;

x) Inform ANRS about the fact of radiation accident and/or incident at radiation facility;

y) Determine the measures to prevent recurrence of the accident and/or incident at radiation facility based on the analysis of accident and/or incident;

z) Fulfill the requirements of "Methodical guidelines on specific requirements of radiation safety during indestructible control, use of radio-isotope tools and radiation research in wells".

**Article 6. Qualifications of a physical or legal person carrying out the activity related to ionizing radiation sources and equipment/machinery containing such sources in industry, science and education**

Required qualifications for a physical or legal person carrying out the activity related to ionizing radiation sources and equipment/machinery containing such sources in the field of industry, science and education should be in line with the area of use of the ionizing radiation source and specificity.

**Article 7. Radiation monitoring in industry, science and education**

1. Radiation monitoring in industry, science and education is implemented in accordance with acting legislation. A monitoring program, which is a part of the quality assurance system should be developed. Monitoring program determines the frequency of radiation controls of individual occupational doses and workplaces and the type of measurements depending on the category and characteristics of the ionizing radiation source.

2. Goals of Radiation Monitoring

a) Ensure the adequacy of radiation safety measures with respect to the hazard of ionizing radiation sources and related activities;

b) Assessment of individual doses for personnel and in the workplace and compliance with regulatory requirements.

**Article 8. Transportation of radioactive materials used in industry, science and education**

Radioactive substances (other than ionizing radiation generators) are classified as Class 7 in accordance with international norms and classifications of hazardous goods transportation of which is regulated by Georgian legislation;

**Article 9. Storage and physical protection (security) of ionizing radiation sources used in industry, science and education**

1. ionizing radiation sources (other than ionizing radiation generators) should be stored/warehoused in a special premise - a temporary storage facility that ensures adherence to safety measures and protection (security) of radioactive sources, including the combination of organizational and engineering-technical measures aimed at detecting, stopping and responding to theft or violation of inviolability of a temporary storage facility.

2. Relevant safety measures should be taken to minimize the harmful impact of ionizing radiation on personnel, population and the environment and to prevent theft of ionizing radiation sources or violation of inviolability of a temporary storage facility.

3. safety measures and physical protection (security) of temporary storage of ionizing radiation sources shall be ensured based on the categorization and characteristics of ionizing radiation sources.

4. Temporary storage of ionizing radiation sources should meet the following requirements:

a) It is inadmissible to store other hazardous materials with ionizing radiation sources;

b) It is inadmissible to store ionizing radiation sources so that the radiation dose in temporary storage facility exceeds the Permissible Dose Limit;

c) The doors of the storage facility and the containers with ionizing radiation sources shall be designed for easy opening;

d) containers with ionizing radiation sources shall be marked;

e) radioactive liquid waste should be placed in solid containers;

5. with the view of ensuring physical protection (security), a differentiated approach should be used considering the categorization of ionizing radiation sources, the expected risks and hazards.

## Article 10. Preparedness and response to radiation accidents and/or incidents in the facility

Preparedness and response plan regarding the radiation accidents and/or incidents in the facility should include both preventive and operational response measures.

a) Preventive measures:

a1) ensure periodic updating of preparedness and response plan for radiation accidents and/or incidents;

a2) Instructing the personnel based on the radiation accident and / or incident response plan;

a3) raising personnel awareness of safety measures in case of radiation accident and / or incident;

b) Operational response measures:

b1) termination of works in the facility;

b2) evacuation of personnel from accident area;

b3) radiation accident and/or incident zone should be marked with a sign of Radiation Hazard:

b4) Determination of the boundaries of radiation accident and/or incident zone based on the value of equivalent dose or radiation contamination;

b5) Equivalent dose in the permissible zone does not exceed 1 μSv/h;

b6) In case of pollution, take decommissioning measures;

b7) providing written notification to ANRS;

b8) develop a plan of emergency liquidation and submit it to the Agency;

b9) perform liquidation activities in accordance with the Plan and in coordination with the ANRS;

b9) assessment of radiation condition by indicating the doses and finalization

of a report;

b10) Determining the causes of radiation accident and / or incident.

## Article 11. Transitional provisions

The Ministry of Environment and Physical Resources Protection of Georgia shall adopt "Methodical guidelines on specific requirements of radiation safety during indestructible control, use of radio-isotope tools and radiation research in wells" by January 1, 2018.