



The Nuclear Regulatory Authority (ARN) is the **Argentine national body dedicated to the regulation and control of nuclear activity** in the areas of radiological and nuclear safety, physical protection and security, safeguards and non-proliferation, in accordance with the competences established in the **National Law (Act No. 24804) of Nuclear Activity** and its Regulatory Decree No. 1390/98.

The ARN is an autonomous entity under the jurisdiction of the Presidency of the Nation, created in 1997 by the National Law of Nuclear Activity. ARN is the successor of the National Board of Nuclear Regulation (1994-1997), which in turn was the continuation of the regulatory branch of the National Atomic Energy Commission (1950-1994).



#### The mission of the ARN is:

- To sustain an appropriate level of protection of people, the environment and future generations from the harmful effects of ionizing radiation.
- To ensure radiological and nuclear safety in nuclear activities carried out in Argentina.
- To ensure that nuclear materials are used only for authorized peaceful purposes and to prevent intentional acts that could cause risk situations.
- To oversee and guarantee compliance with international agreements on nuclear non-proliferation, regulatory standards, and specific provisions included in nuclear cooperation agreements with other countries.
- To define, plan, implement and execute the nuclear regulatory policy.
- To advise the National Executive Branch in the area of nuclear regulatory activity.

# REGULATORY FUNCTIONS

The ARN performs the following functions established by the National Law of Nuclear Activity:

# **ESTABLISHES AND ELABORATES REGULATORY STANDARDS AND GUIDELINES**

The ARN, as the competent national authority, establishes regulatory standards and guidelines that make up the **regulatory framework of the nuclear activity in Argentina. Regulatory standards** are mandatory for all activities regulated by the ARN, and establish requirements for facilities and practices, and for the personnel working in them. Their compliance minimizes radiological risks. The **regulatory guidelines** are complementary to the regulatory standards, of a guiding nature, and contain recommendations for complying with the requirements of the related standards. The ARN also participates in the elaboration and revision of international regulatory standards and guidelines, and technical documents.

# **LICENSES FACILITIES AND PERSONNEL**

The ARN establishes legal ties with parties of regulated activities through **licensing processes**. Thus, it grants licenses and authorizations for specific practices, as well as individual licenses or permits and specific authorizations to personnel with relevant functions at regulated facilities; and issues approval certificates for transport package designs and radioactive materials. In all cases, prior to licensing, detailed evaluations and inspections are carried out to verify that the facilities and their operators comply with the requirements established in the regulatory standards.

**Licensing evaluations** are carried out following specific procedures that consider different aspects such as the type of facility (industrial, medical, mining, production, reactors, etc.) and the stage of the project (design, construction, commissioning, operation or decommissioning). For the transport of radioactive materials, the type of package or radioactive material in special form is considered.

### **OVERSEES AND CONTROLS**

In facilities and practices with a valid license, **the ARN performs regulatory controls through inspections, evaluations and audits** to verify the validity of the license conditions. This includes the **control of compliance with regulatory standards and requirements** on the facilities, their practices, their personnel and the impact on the site and its environment; also covering the transport of radioactive materials.

These controls include aspects of radiological and nuclear safety, physical protection and security, and also that the use of materials, equipment, facilities and information of nuclear interest is carried out exclusively for peaceful purposes (safeguards). The ARN also monitors compliance with international safeguards agreements.

#### **ENFORCES REGULATIONS**

Regulatory controls are complemented by **measures that reinforce compliance with standards and requirements**, through monitoring, inspections and exchanges at different levels of formality, up to the issuance of **formal requirements** and the application of a wide range of **sanctions**. Within this framework, all licenses and authorizations issued by the regulatory body can be suspended and even revoked in cases of relevant non-compliance.

#### **INTERVENES IN EMERGENCY SITUATIONS**

The ARN performs functions in which the State regulates activities involving radiological risk, and maintains an ongoing **Radiological and Nuclear Emergency Response System** in place, which acts in situations that could compromise the control over radioactive or nuclear material, or lack thereof. In nuclear activity, emergencies are defined as a non-ordinary situation involving radioactive materials that requires the prompt adoption of measures to avoid and mitigate adverse consequences for health and the environment.

As a licensing condition for facilities regulated by the ARN, their licensees are required to develop **emergency plans or procedures** to mitigate the consequences of an eventual emergency. These plans are tested through exercises, and their scale and scope will depend on the risk associated with the facility. In the case of nuclear power plants, the drills are supervised by the ARN. These exercises involve the facility, surrounding communities, civilian organizations, security forces and the armed forces participating in the immediate response actions.

The ARN is a member of the National Council for Integrated Risk Management and Civil Protection, according to Law No. 27287, which establishes the National System for Integrated Risk Management and Civil Protection (SINAGIR).

#### MONITORS THE ENVIRONMENT AND EVALUATES RADIOLOGICAL IMPACTS

ARN is the institution responsible for **assessing the environmental radiological impact** of any activity it licenses, through the monitoring, study and follow-up of the incidence, evolution or possibility of environmental damage that may arise from such activities. For this purpose, the ARN carries out **environmental radiological monitoring** in the surroundings of the relevant regulated facilities, in a totally independent manner, by obtaining samples of air, water and soil, among other environmental matrices, which are processed and measured in the ARN laboratories.

The ARN has its own laboratories specialized in different areas that guarantee the radiological protection of workers, patients, the public and the environment. These laboratories are organized under a quality management system and several are accredited by the Argentine Accreditation Body, according to IRAM Standard 301:2005 (ISO/IEC 17025:2017), thus ensuring the quality of their tests and calibrations. The ARN's specialized personnel can perform radiological safety evaluations that make the control and supervision of regulated facilities.

In view of potential emergency scenarios involving accidental releases or exposures, ARN has capabilities to monitor internal exposure and external exposure of people, and to monitor the environment. In addition, it has the capacity to perform dose estimations by means of computational dosimetry, and its personnel are trained to perform assessments in the event of radiological incidents or emergencies.

#### INFORMS AND ADVISES

ARN has established **effective channels of communication** with stakeholders and the public. This includes an updated website, social media, publications and informational materials, technical meetings, informative talks, and public hearings. Also, when notified of out-of-control radioactive material, ARN issues alerts and disseminates **information for the protection of the public**, with the collaboration of the massive media.

**The ARN advises the branches of government** that may require it on matters within its competence, and participates in the implementation of Argentina's international obligations.

#### **EDUCATES AND TRAINS**

For more than forty years, Argentina's educational activity in radiological and nuclear safety has been unceasing. Since 1980, Argentina has been offering postgraduate courses and specialization careers for the training of professionals in Latin America. This history has achieved wide national and international recognition. In 2008, the International Atomic Energy Agency (IAEA) declared the Argentine Republic as a Regional Training Center in Nuclear, Radiation, Transport and Waste Safety for Latin America and the Caribbean (CCR), and the ARN as responsible for its management. Every year, the CCR offers two specialization careers, which are given in conjunction with the University of Buenos Aires, and a Basic Course on Radiation Protection.

The ARN also organizes training courses and workshops in response to specific needs, aimed at its own staff and various interest groups.



# **National Authorities**

Alberto Fernández President of Argentina

Julio Vitobello Secretary General of the Presidency

# NUCLEAR REGULATORY AUTHORITY

## **ARN Board of Directors**

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