

THE IAEA PROMOTES THE APPLICATION OF SAFETY STANDARDS AND BEST PRACTICES FOR THE MANAGEMENT OF RADIOACTIVE WASTE

The IAEA works to promote a high level of safety as it facilitates peaceful uses of nuclear energy worldwide. The IAEA's Statute authorizes it to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards. The Statute also mandates the IAEA to foster the exchange of scientific and technical information to facilitate the peaceful uses of atomic energy.

To this end, the IAEA develops safety standards on different topics, including on the safety of radioactive waste management. These standards, issued in the IAEA Safety Standards Series, reflect an international consensus on what constitutes a high level of safety for protecting people from harmful effects of ionizing radiation and protecting the environment.

The IAEA also launched the IAEA Nuclear Energy Series, which is aimed at promoting best practices in the peaceful uses of nuclear technology, and, in particular, in the management of radioactive waste. These two series are designed to complement each other.

The IAEA Safety Standards Series

The IAEA Safety Standards Series sets out fundamental safety principles, requirements and measures to control radiation exposure of people and radioactive releases to the environment. The standards address the prevention of incidents that might lead to the loss of control over a nuclear reactor core, nuclear chain reaction, radioactive source or any other source of radiation, and how to mitigate the consequences of such events if they do occur. The safety standards are designed for use in relation to facilities and activities that generate radiation risks, such as nuclear installations, the uses of radiation and radioactive materials, the transport of radioactive material and the management of

radioactive waste. The standards are issued in three categories:

Safety Fundamentals (Fundamental Safety Principles) present the fundamental safety objective and principles and concepts of protection and safety, and provide the basis for the Safety Requirements.

Safety Requirements establish the conditions that must be met to ensure the protection of people and of the environment, both now and in the future. The requirements are governed by the objective and principles of the Safety Fundamentals. The requirements must be met; if they are not met, measures must be taken to reach or restore the required level of safety.

Safety Guides provide recommendations and guidance on how to comply with the Safety Requirements. The Guides present international good practices, and they increasingly reflect best practices to help users striving to achieve high levels of safety.

The IAEA safety standards form the basis for the IAEA's safety review services for Member States. Additionally, the standards are used by the IAEA to support competence building, including developing educational curricula and training courses.

The IAEA's Statute binds the IAEA's operations to these safety standards and requires that Member States are also bound to these standards in IAEA assisted operations. The IAEA safety standards also support States in meeting their obligations under international conventions, which establish requirements that are binding on the contracting parties.

The IAEA Nuclear Energy Series

The IAEA Nuclear Energy Series provides guidance and information related to nuclear power, the nuclear fuel cycle, radioactive waste management and decommissioning of facilities, including general topics relevant to

all of these areas. The information in this series builds on the expertise of Member States' representatives participating in technical working groups. The series is designed to assist Member States that are either implementing or planning nuclear activities, and it is structured according to the following levels:

Nuclear Energy Basic Principles publications describe the rationale and vision for the peaceful uses of nuclear energy.

Nuclear Energy Series Objectives explain the expectations to be met in various areas at different stages of implementation.

Nuclear Energy Series Guides provide high level guidance on how to achieve the various objectives related to the peaceful uses of nuclear energy.

Nuclear Energy Series Technical Reports offer more detailed additional information to supplement topics dealt with elsewhere in the IAEA Nuclear Energy Series.

The IAEA Nuclear Energy Series also assists Member States with research and development as well as practical applications of nuclear energy for peaceful purposes. This includes practical examples and lessons learned that can be used by, among others, utilities, owners and operators of facilities, technical support organizations, researchers and government officials.

IAEA Series: Elements of a Whole

These two IAEA series are elements of an international framework of legal instruments, international standards and guidance, national requirements and industry standards which, as a whole, provide a comprehensive system for effectively managing nuclear energy and managing radioactive waste so as to protect people from harmful effects of ionizing radiation and to protect the environment.

Prominent among the legal instruments related to radioactive waste management is the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Joint Convention). The Joint Convention is the only legally binding international instrument between Contracting Parties in the field of safety of spent fuel management and radioactive waste management. The IAEA is the depository for

the Joint Convention and provides its scientific secretariat. The objectives of this Convention are:

(i) To achieve and maintain a high level of safety worldwide in spent fuel management and radioactive waste management, through the enhancement of national measures and international cooperation, including, where appropriate, safety related technical cooperation;

(ii) To ensure that, during all stages of spent fuel management and radioactive waste management, there are effective defences against potential hazards, so that individuals, society and the environment are protected from harmful effects of ionizing radiation; and in such a way that the needs of the present generation are met without compromising the ability of future generations to meet their needs;

(iii) To prevent accidents with radiological consequences and to mitigate the consequences of such accidents if they do occur in any stage of spent fuel management or radioactive waste management.

IAEA Division of Radiation, Transport and Waste Safety and IAEA Division of Nuclear Fuel Cycle and Waste Technology