The responsible use of nuclear technology requires the safe and environmentally sound management of radioactive waste, for which countries need to have stringent technical, administrative and legal measures in place.

The legal aspects of radioactive waste management can be found in a wide variety of legally binding and non-binding international instruments. This overview focuses on the most relevant ones, in particular those on nuclear safety, security, safeguards and civil liability for nuclear damage. It also identifies relevant regional instruments concerning environmental matters, in particular, with regard to strategic environmental assessments (SEAs), environmental impact assessments (EIAs), public access to information and participation in decision-making, as well as access to justice.

In the field of radioactive waste management, the most pertinent treaty is the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). The Joint Convention is applicable to the safety of radioactive waste management when such waste arises from civilian applications, including disused sealed sources, uranium mining, milling wastes and discharges from regulated activities. As an example, according to the Joint Convention, Contracting Parties involved in the transboundary movement of radioactive waste are to take appropriate steps to ensure that such movement is undertaken in a manner consistent with its provisions and other relevant binding international instruments. It is also noted that radioactive waste resulting from the operation of nuclear power plants is covered by both the Joint Convention and the 1994 Convention on Nuclear Safety.

In the field of nuclear safety, the provisions of the legally non-binding 2003 IAEA Code of Conduct on the Safety and Security of Radioactive Sources are also relevant in respect of those disused sealed radioactive sources managed as radioactive waste.

Underpinning these legal instruments are relevant IAEA safety standards, notably the Safety Fundamentals, as well as the Safety Requirements and Safety Guides dealing with the governmental, legal and regulatory framework; predisposal management of radioactive waste; disposal of radioactive waste; the safe transport of radioactive material; and the control of orphan sources and other radioactive material in the metal recycling and production industries.

In the field of nuclear security, the 1980 Convention on the Physical Protection of Nuclear Material (CPPNM), as amended in 2005, addresses the physical protection of nuclear material (including radioactive waste) used for peaceful purposes while it is in international nuclear transport and domestic use, storage and transport. The CPPNM is the only international, legally binding instrument in the area of physical protection of nuclear material.

*Reference should also be made to the article entitled An Expanding International Legal Regime: Environmental Protection & Radioactive Waste Management by Wolfram Tonhauser (Head, IAEA Nuclear and Treaty Law Section, IAEA Office of Legal Affairs) and Gordon Linsley (former Head, IAEA Waste Safety Section), published in Volume 42, Number 3, 2000, IAEA Bulletin.
Furthermore, IAEA safeguards under comprehensive safeguards agreements (CSAs) are applied to all nuclear material within the territory of States with a CSA in force, under their jurisdiction or carried out under their control anywhere. This includes nuclear material contained in retained waste for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices. Furthermore, under additional protocols concluded by CSA States, the IAEA verifies the information provided by States regarding the location or further processing of intermediate or high level waste containing plutonium, high enriched uranium or uranium-233.

Regarding nuclear liability, international legal instruments include the 1963 Vienna Convention on Civil Liability for Nuclear Damage, the 1997 Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and the 1997 Convention on Supplementary Compensation for Nuclear Damage.

Finally, of particular relevance to installations designed for the processing, storage, and disposal of radioactive waste are regional instruments concerning environmental matters. These treaties, adopted under the auspices of the United Nations Economic Commission for Europe (UNECE), address EIAs, SEAs, public access to information, public participation in decision-making and public access to justice. They include the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), the 2003 Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (Kyiv SEA Protocol) and the 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention).

**Nuclear material subject to safeguards under comprehensive safeguards agreements consists of uranium, plutonium and thorium.**

Anthony Christian Wetherall and Isabelle Robin, IAEA Office of Legal Affairs