

GENERAL REMARK

All the activities of the Agency (establish, evaluate, study, create, execute, etc.) can be executed by the Agency itself, subcontracted to third parties, or executed by companies or institutions in which the Agency has a share. Whatever the choice of the Agency, it remains responsible for the obtained results and the strategies to be put into place to obtain these results.

PARTICULARITIES OF THE LONG-TERM RESPONSIBILITY

The Agency executes the long-term management of the activities linked to radioactive residues. These particular aspects are realized by:

- a definition of the missions and responsibilities by the legislator,
- a time scale of ~100 years for the activities of the daily management,
- a five-yearly inventory of the general situation,
- the setting up of structures covering such a time scale,

contractual structure:

responsibility of the producers of the residues for a period of 50 years, long-term financing of the activities by the producers of the residues

technical structure:

treatment and conditioning facilities of the residues for a period of 30 years,

storage facilities of the residues for a period of 75 years, definition of solutions for disposal,

long-term preservation of the memory of the radioactive residues

social structure:

consideration of social aspects

financial structure:

management of the financial provisions destined to cover the long-term costs linked to the storage and disposal.



ONDRAF/NIRAS

ONDRAF/NIRAS BELGIAN AGENCY FOR RADIOACTIVE WASTE AND ENRICHED FISSILE MATERIALS

ONDRAF/NIRAS, the Belgian Agency for radioactive waste and enriched fissile materials, is a public agency established by the law of 08.08.80, replaced by the law of 11.01.91 and the royal decree of 30.03.81, modified by royal decree of 16.10.91. The law of 12.12.97 also entrusts the agency with the inventory of all nuclear liabilities in Belgium.

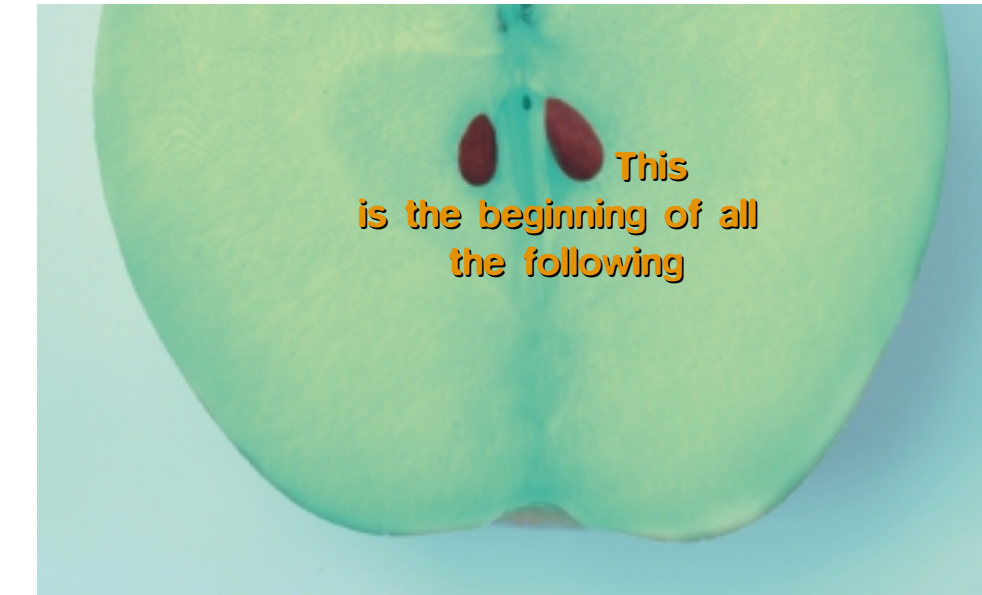
The mission of ONDRAF/NIRAS is to protect man and the environment, for the present and the future, against the potential hazards arising from radioactive waste, without thereby imposing any excessive obligations on future generations. Its competencies cover transport, processing, conditioning, interim storage and final disposal of radioactive waste and spent fuel, as well as the decommissioning of nuclear facilities. The agency is also competent for technical research and R&D in the field of radwaste management, especially with regard to disposal and the optimisation of current practices.

The policy pursued so far is to have its industrial tasks performed by subcontractors as far as transportation is concerned and by Belgoprocess, a 100% subsidiary of ONDRAF/NIRAS, for the activities with regard to the treatment, conditioning and storage awaiting disposal, and decontamination and dismantling of shutdown facilities.

For the R&D in the field of final disposal the SCK•CEN is one of its major partners.

In 1995 the EIG PRACLAY, an Economic Interest Grouping between ONDRAF/NIRAS and SCK•CEN, the Belgian nuclear research centre was set up.

December 18, 2000 the EIG PRACLAY became EIG EURIDICE (European Underground Research Infrastructure for Disposal of Nuclear Waste In Clay Environment). The E.I.G. EURIDICE is in charge of the management and exploitation of the underground research facility (URF) HADES on behalf of the two members. The realisation of the PRACLAY-project, which aims at demonstrating the feasibility of disposal of high-level radioactive waste in a deep clay layer remains one of the major objectives of EURIDICE.



This
is the beginning of all
the following

ONDRAF/NIRAS *Acting today for everyone's future*

Vision

The long-term management of situations resulting from nuclear and non-nuclear applications that produce or have produced radioactive residues, facilities or sites, so that no harmful consequences are caused for man and the environment.



ONDRAF/NIRAS

ONDRAF/NIRAS

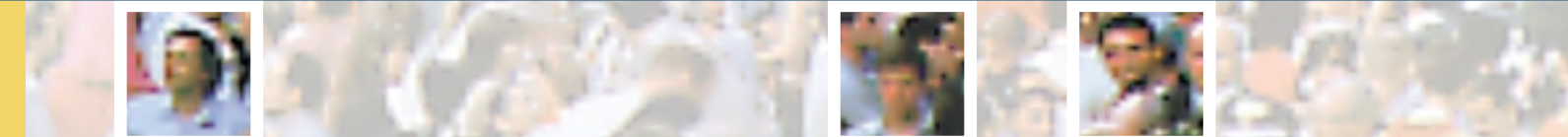
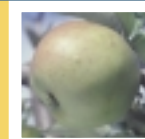
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SITUATIONS INHERITED FROM THE PAST

PRESENT SITUATIONS

FUTURE SITUATIONS

Missions

Ensure that the situations of today, that result from past industrial activities, are cleared so that they do not lead to harmful consequences for man and the environment of today and tomorrow, because of radioactive elements contained in the sites, facilities and residues inherited from these past activities.

Activities from the past must not have a negative impact on the population and the environment of today and tomorrow.

Missions

Ensure that the radioactive residues resulting from present industrial activities are managed, and that the future dismantling of the facilities and the remediation of the sites can be done, in such a way that they do not lead to harmful consequences for man and the environment of today and tomorrow, because of radioactive elements contained in the sites, facilities and residues.

Missions

Ensure the long-term management of the radioactive residues resulting from past, present and future industrial activities, in such a way that they do not lead to harmful consequences, also in the long term, for man and the environment.

Manage in the short, medium and long term the radioactive residues from the past, the present and the future, from the moment that they are transferred to the Agency.

Tasks

- Establish the radiological and physical inventory of the sites, facilities and residues,
- Study the solutions to put into place,
- Evaluate the financial needs, and check the availability of the funds necessary to put these solutions into practice,
- On the request of third parties, execute the remediation and/or dismantling programme.

Tasks

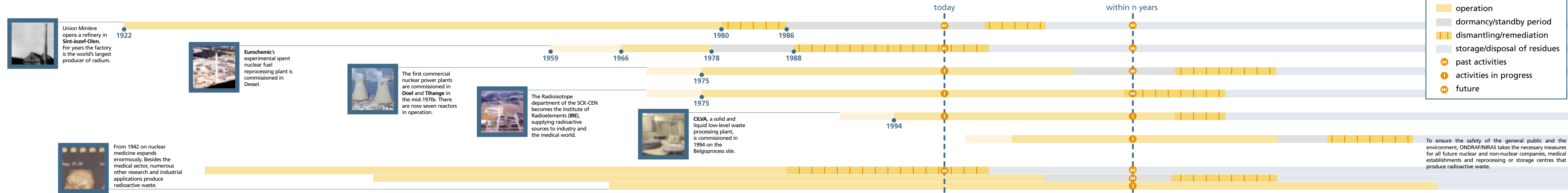
- Establish the radiological and physical inventory of the radioactive substances present in the facilities, as well as that of the sites, facilities and residues at the time of the final shutdown of operation,
- Evaluate the financial needs, and check the future availability of funds necessary to manage these residues, to dismantle the facilities and to clean the sites,
- Qualify the facilities in which radioactive residues are characterized, treated, conditioned and stored.

Tasks

- Periodically evaluate the regulatory, social and technological advances concerning the long-term management of radioactive residues,
- Adapt the long-term management processes and facilities based on the results of the periodic evaluations,
- Maintain and supervise in the long term the radioactive residues in the stores and disposals.

- Evaluate the technical needs for the short, medium and long-term management of the radioactive residues from the past, the present and the future, taking into account the economic, security and social aspects.
- Carry out the necessary studies and R&D to define the technical facilities that the Agency needs,
- Create the necessary facilities required for this management,
- Accept, remove, transport, treat*, condition*, store and supervise the residues transferred to the Agency.
* non-conditioned waste

A few examples of activities in Belgium relating to radioactive residues:



The Research Centre for Nuclear Energy Applications is founded in 1952, later renamed the Nuclear Research Centre.

From 1960 on several countries dump their low-level waste on the seabed. Disposal of radioactive materials at sea is banned in 1982.

In 1966 the Vanden Boeynants-De Clercq government gives the go-ahead for the construction of the first nuclear power plants at Doel and Tihange.

Since 1978 great progress has been made in research on deep disposal of radioactive waste, thanks to the 'HADES' underground laboratory in Mol.

ONDRAF/NIRAS is established by law in 1980. This public agency is responsible for managing radioactive waste in Belgium.

Belgoprocess

Since 1986 ONDRAF/NIRAS has used its subsidiary Belgoprocess NV in Mol-Dessel for processing and interim storage of radioactive waste and decommissioning of nuclear facilities.

Interim storage of drums arising from processing low-level waste on the Belgoprocess site in Mol-Dessel.

Interim storage of drums arising from vitrification of high-level waste.

EIG EURIDICE is the joint venture set up by ONDRAF/NIRAS and SCK-CEN to implement the PRACLAY programme. PRACLAY is a demonstration programme designed to prove the technical feasibility of disposing of high-level waste in deep clay layers.

MONA

ONDRAF/NIRAS participates in local partnerships with the aim of drawing up preliminary designs for a repository for short-lived low-level waste. STOLA is a study and consultative group on low-level waste, and MONA is a consultative group on type A radioactive waste.

Surface disposal involves storing radioactive waste in concrete modules on the surface of the earth.

Deep disposal involves storing radioactive waste indefinitely within an infrastructure in a deep clay layer.