RADIOACTIVE WASTE R&D, FRENCH LAW, AND CONSEQUENCES ON THE R&D PROGRAM

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DISPOSALS

LOW LEVEL WASTES : SHALLOW LAND BURIAL

1969-1994 LA MANCHE

1992-2025 CENTRE DE L’AUBE

MEDIUM AND HIGH ACTIVITY WASTES

DEEP GEOLOGICAL DISPOSAL

FUEL CYCLE DIRECTION —— WE WORK FOR THE FUTURE
ACTIONS UNDERTAKEN IN 1991

■ AT THE GOVERNMENTAL LEVEL

- REVIEW BY

OFFICE PARLEMENTAIRE DES CHOIX SCIENTIFIQUES ET TECHNIQUES

COLLEGE DE PREVENTION DES RISQUES TECHNOLOGIQUES

- PREPARATION AND DISCUSSION IN THE PARLIAMENT OF A DRAFT LAW

■ AT THE PARLIAMENT LEVEL

A LAW ON RADIOACTIVE WASTE MANAGEMENT HAS BEEN VOTED

ON DECEMBER 30, 1991

\_FUEL CYCLE DIRECTION\_ WE WORK FOR THE FUTURE
THE LAW CONTAINS 15 ARTICLES

ARTICLE 1 - HIGH-LEVEL, LONG-LIVED RADIOACTIVE WASTE SHALL BE MANAGED IN A MANNER THAT ENSURES THE PROTECTION OF NATURE, OF THE ENVIRONMENT AND OF PUBLIC HEALTH, AND THAT RESPECTS THE RIGHTS OF POSTERITY.

ARTICLE 3 - RADIOACTIVE WASTE FROM FOREIGN SOURCES SHALL NOT BE DISPOSED OF IN FRANCE, EVEN IF IT WAS REPROCESSED ON FRENCH TERRITORY, NOR SHALL IT BE STORED BEYOND WHAT IS CUSTOMARY AND NORMAL AFTER REPROCESSING.

ARTICLE 3.1 - UNDERGROUND DISPOSAL OF ANY TYPE OF DANGEROUS SUBSTANCE IN DEEP GEOLOGIC FORMATIONS SHALL BE LICENSED BY THE ADMINISTRATION.

ARTICLE 4 - TREATS OF THE RESEARCH PROBLEMS AND THE WAY OF REPORTING

ART. 5 TO 10 - TREATS OF THE CREATION AND THE OPERATION OF UNDERGROUND LABS.

ARTICLE 13 - TREATS OF THE CREATION OF AN AGENCY (ANDRA)

ARTICLE 14 - TREATS OF OPENNESS

FUEL CYCLE DIRECTION ———————————————————————————————————— WE WORK FOR THE FUTURE
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UNDERGROUND LABORATORIES

CONSTRUCTION AND OPERATION SUBJECT TO CONSENSUS WITH ELECTED LOCAL AUTHORITIES (by decree)

RETRIEVABILITY ORIENTED CONCEPT

POSSIBILITY OF TEMPORARY USE OF RADIOACTIVE SOURCES FOR EXPERIMENTAL PURPOSES

STORAGE AND DISPOSAL OF RADIOACTIVE WASTES PROHIBITED

CREATION ON EACH SITE OF A LOCAL COMMITTEE IN CHARGE OF INFORMATION AND FOLLOW-UP


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CREATION OF A NATIONAL AGENCY FOR THE MANAGEMENT OF RADIOACTIVE WASTES

● A BODY PLACED UNDER THE SUPERVISION OF:
  - MINISTRY OF INDUSTRY
  - MINISTRY OF RESEARCH
  - MINISTRY OF THE ENVIRONMENT

● IN CHARGE OF LONG TERM RADIOACTIVE WASTE MANAGEMENT OPERATIONS:
  - MANAGEMENT OF LONG TERM DISPOSAL SITES
  - DESIGN, SITING AND CONSTRUCTION OF NEW FACILITIES
  - CONSTRUCTION AND OPERATION OF UNDERGROUND LABORATORIES
  - WRITING DOWN OF PACKAGING AND DISPOSAL SPECIFICATIONS

. INVOLVEMENT IN THE SETTING UP AND THE CARRYING OUT, JOINTLY WITH CEA, OF R&D PROGRAMS ON LONG TERM MANAGEMENT

FUEL CYCLE DIRECTION ________________________________ WE WORK FOR THE FUTURE
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ON RADIOACTIVE WASTE MANAGEMENT RESEARCH

- THREE R&D PROGRAMS ARE TO BE CARRIED OUT IN PARALLEL:
  • STUDY OF DEEP UNDERGROUND FORMATIONS AND CONSTRUCTION
    OF UNDERGROUND LABORATORIES
  • R&D ON PARTITIONING AND TRANSMUTATION OF NUCLIDES
    WITH A LONG HALF-LIFE
  • R&D ON PROCESSES FOR WASTE PACKAGING

- YEARLY PROGRESS REPORT SUBMITTED TO PARLIAMENT
  BY THE GOVERNMENT

- FINAL ASSESSMENT REPORT WITHIN THE NEXT 15 YEARS

FUEL CYCLE DIRECTION WE WORK FOR THE FUTURE
OPENNESS

- ANNUAL PROGRESS REPORT

- REVIEW BY A NATIONAL COMMITTEE

- TWO INTERNATIONAL EXPERTS

- NOMINATED AFTER PROPOSAL BY

THE “OFFICE PARLEMENTAIRE DES CHOIX…”

THE ACADEMY OF SCIENCES

THE HIGH COUNCIL FOR NUCLEAR SAFETY AND INFORMATION
OPENNESS

- D I S C U S S I O N  W I T H  T H E  C O N C E R N E D  C O M M U N I T I E S

- LOCAL INFORMATION COMMITTEES
- ELECTED PEOPLE, LOCAL ASSOCIATIONS, ...
- OPEN TECHNICAL REPORTS
- A NEGOTIATOR

-FINAL DECISION AT THE GOVERNMENTAL LEVEL
BY A LAW WITHIN 15 YEARS
The National Assembly and the Senate have enacted, and

The President of the Republic hereby promulgates the Law with the following provisions:

Article 1 - High-level, long-lived radioactive waste shall be managed in a manner that ensures the protection of nature, of the environment and of public health, and that respects the rights of posterity.

Article 2 - Article 3-1 below shall be inserted under Article 3 of Law No. 76-663 of July 19, 1976 on facilities subject to restrictions relative to environmental protection.

"Article 3-1 - underground disposal of any type of dangerous substance in deep geologic formations shall be licensed by the administration. Licenses are granted or renewed for limited periods only, and may therefore require retrievable disposal. Disposal materials shall be retrieved when the license expires. The conditions under which certain exceptions may be made to the provisions of the preceding paragraph, allowing licenses to be granted or renewed for unlimited periods, shall be set fore-h in a future law."

Article 3 - Radioactive waste from foreign sources shall not be disposed of in France, even if it was reprocessed on French territory, nor shall it be stored beyond what is customary and normal after reprocessing.

Article 4 - The Government shall submit an annual report to Parliament on the status of research on high-level long-lived radioactive waste management and studies conducted in parallel, including:

- research on separation and transmutation of long-lived radioactive elements in the waste;
- evaluation of options for retrievable or non-retrievable disposal in deep geologic formations, particularly through the creation of underground laboratories; and
study of immobilization processes and long-term sun-ace storage techniques for the waste.

The annual report shall also describe the status of foreign research and construction projects.

No more than fifteen years after the promulgation of this Law, the Government shall submit an overall assessment of the above research to Parliament, together with a draft law authorizing, if appropriate, the creation of a disposal facility for high-level, long-lived radioactive waste in which the specific functions and requirements of the facility are set forth.

Parliament shall have the reports reviewed by the Office Parlementaire d'évaluation des choix scientifiques et technologiques [Parliamentary Commission on the Assessment of Scientific and Technological Choices].

The reports shall be made public.

The reports shall be prepared by a National Review Board consisting of:

- six qualified individuals, including at least two international experts, recommended by the Office Parlementaire d'évaluation des choix scientifiques et technologiques and appointed by an equal vote of the National Assembly and the Senate;

- two qualified individuals recommended by the Conseil supérieur de la sûreté et de l'information nucléaires (High Council on Nuclear Safety and Public information) and appointed by the Government; and

- four scientific experts recommended by the Academy of Sciences and appointed by the Government.

Article 6- Articles 6 through 12 below set forth the conditions for the creation and operation of underground laboratories designed to study deep geologic formations where high-level long-lived radioactive waste may be disposed of or stored.

Article 6- Local officials and members of the public from the affected site shall be involved pursuant to the provisions of a relevant decree before any preliminary site investigations for a proposed underground laboratory shall begin.
Article 7- Site investigations in advance of laboratory construction shall comply with the requirements of the Law of December 29, 1892 on damage to private property caused by public works.

Article 8 - Without prejudice to the provisions of Law No. 76-463 of July 19, 1976 on facilities subject to restrictions relative to environmental protection, the creation and operation of an underground laboratory are contingent upon a license granted by a decree of the Conseil d'Etat (Constitutional Council), pursuant to an environmental impact assessment and the opinions of the affected municipal, general and regional councils, and following a public hearing organized pursuant to the provisions of Law No. 83-630 of July 12, 1983 on the democratization of public hearings and on the protection of the environment.

The license shall be accompanied by detailed specifications.

The license applicant shall possess the necessary technical and financial resources to ensure the success of the project.

Article 9 - The license confers upon the license holder the exclusive right to commence surface and sub-surface construction, and to handle materials excavated during these activities within the perimeter defined by the decree.

Property owners inside the legal perimeter shall be compensated either by mutual agreement with the license holder, or through the expropriation process.

Eminent domain may be exercised to expropriate all or part of the property for the license holder.

Article 10 - The license shall moreover establish a buffer zone outside the perimeter described in the previous paragraph, inside which the entity with administrative authority may prohibit or regulate construction or other activities that may by their nature compromise the integrity of the facility or the operations of the laboratory on a technical level.

Article 11 - Radioactive sources may be used temporarily in the underground Laboratories for experimental purposes.

Radioactive waste shall not be stored or disposed of in the laboratories.
Article 12- Pursuant to the provisions of Article 21 of Law No. 82-610 of July 15, 1982 on the orientation and planning of technological research and development in France, a Public Interest Group may be formed to undertake companion activities and to manage local resources to benefit and facilitate the construction and operation of each laboratory.

In addition to the Government and the license holder described in Article 8, entities entitled to join the Public Interest Group include the region and department where the main access shaft to the laboratory is located, communes whose lands are less than ten kilometers from the shaft, and local cooperatives established for the purpose of promoting the economic development of the affected area.

Article 13 - A public industrial and commercial entity is hereby established under the name Agence nationale pour la gestion des déchets radioactifs [National Radioactive Waste Management Agency], which reports to the Ministries of industry, of Research and of the Environment.

The Agency is charged with waste management operations for long-lived radioactive waste, with specific responsibilities including:

- to assist, especially in moderation with the Commissariat à l'Energie Atomique [Atomic Energy Commission], in the definition of research and development programs concerning long-term radioactive waste management, and to participate in them;

- to manage long-term disposal facilities either directly or through a third party acting on its behalf;

- to design, site and construct new disposal facilities, taking into consideration long-term production and waste management plans, and to execute appropriate actions to that end, particularly the construction and operation of underground laboratories designed to study deep geologic formations;

- to establish specifications for radioactive waste solidification and disposal that comply with safety regulations; and

- to prepare an inventory of the condition and location of all radioactive waste in the country.
Article 14 - A Local Information and Oversight Committee is hereby established for each underground laboratory site.

In addition to the license holder, the Committee shall include representatives of the Government, two deputies and two senators appointed by their respective assemblies, officials from the local communities which participated in the public hearing, members of environmental protection organizations, farm councils, representatives of professional associations and elected representatives of site personnel.

At least half of the committee members shall be officials from local communities which participated in the public hearing. The Prefect of the Department hosting the laboratory shall chair the committee.

The committee shall meet at least two times a year. It shall be briefed on project goals, on the type of work being performed, and on the status of the project. The committee may appeal to the National Review Board described in Article 4.

The committee shall be consulted on all operations-related matters that may meet the environment and the region. The Committee may have reviews or independent audits performed by qualified laboratories.

Start-up and operating expenses of the Local Information and Oversight Committee shall be paid by the Public Interest Group described in Article 12.

Article 15 - Implementing measures for the present Law shall be established as necessary by a decree from the Conseil d'Etat.

The present Law shall be executed as a law of the State.


By the President of the Republic, FRANCOIS MITTERRAND

The Prime Minister, EDITH CRESSON

The Minister of State and Minister of the Economy, Finances and Budget, PIERRE BEREGOVOY

The Minister of State and Minister of Public Affairs and of the Administration, JEAN-PIERRE SOISSON

The Minister of Research and Technology, HUBERT CURIEN

The Minister of the Environment, BRICE LALONDE

The Minister in Charge of the Budget, MICHEL CHARASSE

The Minister in Charge of Industry and Commerce, DOMINIQUE STRAUSS-KAHN
(1) Legislative Record of Law No. 91-1381

National Assembly:
Draft Law No. 2049;
Report No. 2115 by Mr. Christian Bataille on behalf of the Committee
On Production;

Senate:
Draft Law No. 431 (1990-1991), adopted by the National Assembly;
Report No. 58 (1991-1992) by Mr. Henri Revol on behalf of the
Committee on Economic Affairs;
Debated and adopted November 6, 1991.

National Assembly:
Draft Law No. 2319, marked up by the Senate;
Report No. 2331 by Mr. Christian Bataille on behalf of the Committee
on Production;

Senate:
Draft Law No. 110 (1991-1992), adopted with modifications by the
National Assembly after the second reading;
Report No. 127 (1991-1992) by Mr. Henri Revol on behalf of the
Committee on Economic Affairs;

National Assembly:
Draft Law No. 2450, marked up by the Senate at the second reading;
Report No. 2464 by Mr. Christian Bataille on behalf of the Joint
Committee;
Debated and adopted December 17, 1991.

Senate:
Draft Law, adopted by the National Assembly;
Committee;