

**No. 18037**

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**UNITED STATES OF AMERICA  
and  
FEDERAL REPUBLIC OF GERMANY**

**Arrangement relating to the management of radioactive wastes (with patent addendum and appendix). Signed at Bonn on 20 December 1974**

*Authentic texts: English and German.*

*Registered by the United States of America on 14 November 1979.*

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**ÉTATS-UNIS D'AMÉRIQUE  
et  
RÉPUBLIQUE FÉDÉRALE D'ALLEMAGNE**

**Accord relatif aux échanges techniques et à la coopération dans le domaine de la gestion des déchets radioactifs (avec additif relatif aux brevets et appendice). Signé à Bonn le 20 décembre 1974**

*Textes authentiques : anglais et allemand.*

*Enregistré par les États-Unis d'Amérique le 14 novembre 1979.*

## TECHNICAL EXCHANGE AND COOPERATIVE ARRANGEMENT<sup>1</sup> BETWEEN THE UNITED STATES ATOMIC ENERGY COMMISSION AND THE FEDERAL MINISTRY FOR RESEARCH AND TECHNOLOGY OF THE FEDERAL REPUBLIC OF GERMANY IN THE FIELD OF MANAGEMENT OF RADIOACTIVE WASTES

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The United States Atomic Energy Commission (AEC) and the Federal Ministry for Research and Technology (FMRT) of the Federal Republic of Germany, having a mutual interest in cooperation in the field of management of radioactive wastes hereby agree as follows:

*Article 1.* The subjects of cooperation are defined in Appendix A, and can be modified or expanded, as may be mutually agreed.

*Article 2.* Both Parties will make available to each other information in the field of radioactive waste management which they have the right to disclose, either in their possession or available to them, from the technical areas described in Appendix A.

*Article 3.* The information exchange will be reciprocal (balanced) and will be in the form of technical reports, experimental data, correspondence, visits, joint experts meetings, and such other means as the Parties agree.

*Article 4.* The execution of joint programs and projects, or those programs and projects under which activities are divided between both Parties, including the use of test facilities and/or computer programs owned by either Party, will be agreed upon on a case-by-case basis. Long-term assignments of personnel can be accommodated on the same basis.

*Article 5.* In general, information received pursuant to this Arrangement may be disseminated freely in the country of the recipient. However, privileged (private, proprietary, company confidential) information received by either Party under this Arrangement and bearing a restrictive designation may not, except as may be required by the laws of the respective Party, be publicly disseminated by the receiving Party without the prior written consent of the transmitting Party, but such information may be disseminated as follows:

- (a) To persons within or employed directly by the recipient, and to other concerned government agencies;
- (b) To prime or sub-contractors of the recipient Party for use only within the framework of its contract(s) with the respective Parties engaged in work relating to the subject matter of the information so disseminated;

provided that privileged information disseminated to any person under subparagraphs (a) and (b) above bear the marking "Not for dissemination outside recipient's organization without prior written approval of the (AEC or FMRT)". Each Party will use its best efforts to ensure that the dissemination of privileged information received under this Arrangement is controlled as prescribed herein.

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<sup>1</sup> Came into force on 20 December 1974 by signature, in accordance with article 15.

*Article 6.* The information exchanged under this Arrangement shall be subject to the patent provisions in the Patent Addendum to this document.

*Article 7.* A coordinator will be designated by each Party, who will develop and control the arrangements and procedures for implementing the cooperation, in particular the effective exchange of information under this Arrangement. Approximately annually, the coordinators will organize joint working sessions at which the achievements, problems, effectiveness, future programs, etc., will be discussed with the objective of improving the cooperation.

*Article 8.* The application or use of any information exchanged or transferred between the Parties under this Arrangement shall be the responsibility of the Party receiving it, and the transmitting Party does not warrant the suitability of such information for any particular use or application.

*Article 9.* Each Party will be prepared to the best of its ability, upon specific request, to advise the other on particular questions involving the topics of this Arrangement.

*Article 10.* It is the intent of both Parties to assure that a reasonably balanced exchange is achieved and maintained.

*Article 11.* It is understood that the ability of the Parties to carry out their obligations is subject to the availability of appropriated funds.

*Article 12.* No provision has been made for reciprocal cost reimbursement between the Parties. Both Parties shall bear the costs incurred in their area of competence, including travel expenses and subsistence allowances for their staff members and transport costs for apparatuses and other equipment transported under the cooperation program into the territory of the other Party in each case.

*Article 13.* This Arrangement shall also apply to Land Berlin, provided that the Government of the Federal Republic of Germany has not made a contrary declaration to the Government of the United States of America within three months from the date of entry into force of this Arrangement.

*Article 14.* This Arrangement shall remain in operation for five (5) years after its effective date and may be extended by mutual agreement. However, the Arrangement may be terminated at any time, at the discretion of either Party, upon six months' advance written notification by the Party seeking to terminate, to the other Party.

*Article 15.* This Arrangement shall enter into force on the date of signature.

DONE at Bonn in duplicate in the English and German languages, each equally authentic, this twentieth day of December, 1974.

For the United States  
Atomic Energy Commission:

FRANK E. CASH, Jr.

The Federal Minister for Research and  
Technology of the Federal Republic of  
Germany,

HANS MATTHOEFER

## PATENT ADDENDUM

A. With respect to any invention or discovery made or conceived during the period of, and in the course of or under, this technical exchange and cooperative Arrangement on radioactive waste management between the United States Atomic Energy Commission (AEC) and the Federal Ministry for Research and Technology (FMRT) of the Federal Republic of Germany:

- (1) If made or conceived by personnel of one Party (the assigning Party) or its contractors while assigned to the other Party (recipient Party) or its contractors:
  - (a) The recipient Party shall acquire all right, title, and interest in and to any such invention, discovery, patent application or patent in its own country and in third countries, subject to a non-exclusive, irrevocable, royalty-free license to the assigning Party, with the right to grant sublicenses, under any such invention, discovery, patent application or patent for use in the production or utilization of special nuclear material or atomic energy; and
  - (b) The assigning Party shall acquire all right, title, and interest in and to any such invention, discovery, patent application, or patent in its own country, subject to a non-exclusive, irrevocable, royalty-free license to the recipient Party, with the right to grant sublicenses, under any such invention, discovery, patent application or patent, for use in the production or utilization of special nuclear material or atomic energy.
- (2) If made or conceived while in attendance at meetings or when employing information which has been communicated under this exchange Arrangement by one Party or its contractors to the other Party or its contractors, the Party making the invention shall acquire all right, title, and interest in and to any such invention, discovery, patent application or patent in all countries, subject to the grant to the other Party of a royalty-free, non-exclusive, irrevocable license, with the right to grant sublicenses, in and to any such invention, discovery, patent application, or patent, in all countries, for use in the production or utilization of special nuclear material or atomic energy.
- (3) It is understood that after the European Patent Conventions<sup>1</sup> (*"Uebereinkommen ueber die Erteilung europaeischer Patente"*, *"Uebereinkommen ueber das europaeische Patent fuer den Gemeinsamen Markt"*) have come into force, either Party may request a modification of this paragraph A for the purpose of according equivalent rights as provided in subparagraphs 1 and 2 above under the European Patent Conventions.

B. Neither Party shall discriminate against citizens of the country of the other Party with respect to granting any license or sublicense under any invention pursuant to subparagraphs A(1) and A(2) above. It is understood that the licensing policies and practices of each Party can be affected because of the rights of both Parties to grant licenses within a single jurisdiction. Accordingly, each Party may request, in regard to a single invention or class of inventions, that the Parties consult in an effort to lessen or eliminate any detrimental effect that the parallel licensing authorities may have on the policies and practices of the Parties.

C. Each Party waives any and all claims against the other Party for compensation, royalty or award as regards any inventions or discovery, patent application, or patent, made or conceived under this Arrangement, and releases the other Party with respect to any and all such claims, including any claims under the provisions of the United States Atomic Energy Act of 1954, as amended, and the German Employees' Inventions Law (*Arbeitnehmererfindergesetz*) of July 1957 (BGB1.1957, Part I, page 756) as amended, and the FMRT assumes the obligation under the said German law for use of patents by or on behalf of the AEC.

<sup>1</sup> See "Convention on the Grant of European Patents, concluded at Munich on 5 October 1973" in United Nations, *Treaty Series*, vol. 1065, p. 199.

## APPENDIX A

## TECHNICAL SCOPE

## AEC-FMRT RADIOACTIVE WASTE MANAGEMENT EXCHANGE\*

1. Disposal of radioactive waste in salt deposits
  - a. Facility design and operation, including data on contamination of salt
  - b. Heat generation and dissipation
  - c. Rock mechanics studies
  - d. Safety considerations and cleanliness standards for casks
  - e. Geology and hydrology
  - f. Waste product criteria
  - g. Site criteria
  - h. Cost evaluation
  - i. Records of repositories
  - j. Risk analysis
  - k. Monitoring and control
  - l. Public information and relations
2. Retrievable surface storage facilities
3. Waste management research and development
  - a. Solidification of high-level waste
  - b. Treatment and packaging of intermediate- and low-level waste
  - c. Incineration and incorporation in bitumen
  - d. Processes for removal and storage of noble gases and tritium in waste streams
  - e. Development of criteria for handling and storage of all classes of radioactive waste
  - f. Feasibility, safety and economic analysis for alternative long-term waste management methods adopted or under consideration
  - g. Processes and methods for the partitioning of high-level waste and for the extraction of selected nuclides
4. Waste from decommissioning of nuclear installations
5. Operating aspects of storage or disposal of low- and intermediate-level wastes
  - a. Methods of minimizing initial generation
  - b. Current efforts on volume reduction, such as incineration and compaction
  - c. Current methods and limitations for packaging, handling and storage/disposal, including existing criteria
  - d. Currently identified categories requiring special or unique handling
6. Transportation of radioactive waste
  - a. Development of a transportation handling and shipping system for low-level waste
  - b. Design and approval of a high-level waste shipping package concept
  - c. Waste packaging technology
  - d. Safety evaluation techniques for waste packaging and transport systems, including a quantification of risk.

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\* Initially, the facilities involved in this exchange on the AEC side will be Oak Ridge National Laboratory (ORNL), Los Alamos Scientific Laboratory (LASL), Argonne National Laboratory (ANL), Atlantic Richfield Hanford Co. (ARHCO), Battelle Memorial Institute/Pacific Northwest Laboratory (BNWL) and the waste management facilities at the Idaho National Engineering Laboratory (INEL), and those on the FMRT side will be Gesellschaft fuer Kernforschung m.b.H (GfK), Gesellschaft fuer Strahlen- und Umweltforschung m.b.H (GSF), Kernforschungsanlage Juelich G.m.b.H. (KFA) and Hahn-Meitner Institut fuer Kernforschung G.m.b.H. (HMI).