

AGREEMENT
BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND THE
NUCLEAR WASTE MANAGEMENT ORGANIZATION OF JAPAN
IN THE FIELD OF
RADIOACTIVE WASTE MANAGEMENT

The Department of Energy of the United States of America (hereinafter referred to as "DOE") and the Nuclear Waste Management Organization of Japan (hereinafter referred to as "NUMO") (hereinafter referred to as "the Parties")

Noting DOE's responsibility in the United States for the disposal of spent nuclear fuel and radioactive wastes as well as research and development in the area of environmental restoration, and NUMO's responsibility in Japan for the implementation of a high-level radioactive waste management program, and coordination of research and development activities;

Having a mutual interest in the safe, effective and economic disposal of radioactive waste products;

Recognizing the contribution that such research and development data, technology and experience in radioactive waste management can make to protecting the environment; and

Believing that a cooperative program of equitable sharing of their respective research and development data, technology, and experience in the management of radioactive waste would be of mutual benefit;

Have agreed as follows:

ARTICLE 1 - OBJECTIVE

The objective of this Agreement is to establish a framework for cooperation in the management of radioactive wastes for the purpose of minimizing the consequences of radioactive contamination on health and environment. Cooperation between the Parties shall be on the basis of mutual benefit, equality, and reciprocity.

ARTICLE 2 - AREAS OF COOPERATION

Cooperation under this Agreement may include the following areas related to implementation of a High-Level Nuclear Waste repository program in Japan:

- A. Characterization of geologic formations;
- B. Field and laboratory testings;
- C. Engineering technology for engineered barriers;
- D. Engineering technology related to design, construction, operation, and closure for repository;
- E. Environmental and safety issues;
- F. Performance/safety assessment issues;
- G. Information management and quality assurance;
- H. Public acceptance issues;
- I. Experience in siting of facilities;
- J. Such other areas of cooperation as may be agreed by the Parties in writing.

ARTICLE 3 - FORMS OF COOPERATION

Cooperation under this Agreement may include the following forms:

- A. Exchange or assignment of scientists, engineers, and other specialists for agreed periods for participation in agreed research, development, analysis, design and experimental activities conducted in research centers, laboratories, engineering offices, and other facilities and enterprises of each of the Parties or its contractors in accordance with Article 7;
- B. Exchange of scientific, technical and public acceptance information, and results of research development and social impact studies;
- C. Exchange of samples, materials, and equipment for testing;
- D. Organization of and participation in seminars and other meetings on specific topics in the areas of cooperation listed in Article 2;

- E. Short visits by specialist teams or individuals to the radioactive waste management facilities of the other Party subject to the prior written agreement of the Party;
- F. Observation of and participation in studies related to the areas of cooperation listed in Article 2;
- G. Joint projects in which the Parties agree to share work and/or costs; and
- H. Such other specific forms of cooperation as the Parties may agree.

ARTICLE 4 - MANAGEMENT

- A. Each Party shall name a Principal Coordinator to supervise activities under this Agreement. The Principal Coordinators shall meet annually, alternately in the United States and in Japan, to evaluate the status of cooperation under this Agreement. This evaluation will include a review of the achievements, problems, and effectiveness of activities under this Agreement. The Principal Coordinators also will consider future program opportunities with a view to maximizing the mutual benefits of cooperation.
- B. Subject to the prior approval of the Parties, the Principal Coordinators may appoint Technical Coordinators to manage specific cooperative activities initiated under this Agreement and to establish and maintain working contacts at the staff level.

ARTICLE 5 - IMPLEMENTING ARRANGEMENTS

When the Parties agree to undertake a form of cooperation set forth in paragraphs A, C, G or H of Article 3, the Parties shall conclude an Implementing Arrangement, which shall be annexed to this Agreement and subject to its terms. Each Implementing Arrangement shall include detailed provisions for carrying out the activity, and shall cover such matters as technical scope, total costs, cost-sharing between the Parties, project schedule, management of the cooperation, exchange of equipment, and any special provisions necessary for treatment of business confidential information, intellectual property, and information disclosure specific to the particular project. Activities under Implementing Arrangements may involve, as appropriate, laboratories of the Parties or their contractors or their contractors' subsidiaries.

ARTICLE 6 - EXCHANGE OF INFORMATION

The Parties agree that information provided or exchanged under this Agreement may be given wide distribution for ensuring transparency and traceability of documents published by either Party, and may be made available to the public by either Party through customary channels and in accordance with normal procedures of the Parties, subject to the provisions of Article 8 and the Annex on "Protection and Distribution of Intellectual Property Rights and Other Rights of a Proprietary Nature."

ARTICLE 7 - EXCHANGE OF PERSONNEL

- A. Whenever an assignment or exchange of personnel is contemplated under paragraph A of Article 3, each Party shall ensure that qualified personnel are selected for assignment to the other Party;
- B. Each Party shall be responsible for the salaries, travel, and living expenses of its personnel while on assignment to the host Party, unless otherwise agreed;
- C. The Receiving Party shall arrange for accommodations for assigned personnel and families of the other Party or its contractors on a mutually agreeable reciprocal basis;
- D. The Receiving Party shall provide all necessary assistance to the assigned personnel and their families regarding administrative formalities such as travel arrangements and work permits; and
- E. Assigned personnel shall conform to the general and special rules of work and safety regulations in force at the establishment of the Receiving Party, unless otherwise agreed in separate implementing arrangements. Such special rules of work may include restrictions on access to sensitive or classified facilities or areas.

ARTICLE 8 - INTELLECTUAL PROPERTY RIGHTS

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Agreement and relevant Implementing Arrangements. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Agreement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in the attached Annex, "Protection and Distribution of Intellectual Property Rights and Other Rights of a Proprietary Nature."

ARTICLE 9 - SECURITY OBLIGATIONS

The Parties shall not provide or exchange information which is classified under the laws of either Party.

ARTICLE 10 - GENERAL PROVISIONS

- A. All equipment supplied and information transmitted by one Party to the other Party under this Agreement shall be appropriate and accurate to the best knowledge and belief of the supplying and transmitting Party, but the Party does not warrant the accuracy, completeness, usefulness, or suitability of any equipment or services supplied or information or data transmitted for any particular use or application by the receiving

Party or by any third party. All equipment and information developed jointly by the Parties shall be accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed equipment and information nor its suitability for any particular use or application by either Party or by any third Party.

- B. Unless otherwise specifically agreed in writing, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them.
- C. If one Party finds it necessary, that Party shall have the opportunity to observe activities under this Agreement in a facility of the other Party, subject to the approval of the other Party.
- D. Each Party's activities under this Agreement shall be in accordance with its national laws and regulations.
- E. All questions of interpretation and implementation related to this Agreement shall be settled by the Parties by mutual agreement.
- F. Each Party shall carry out its activities under this Agreement subject to the availability of appropriated funds.

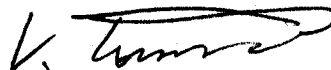
ARTICLE 11 - DURATION, AMENDMENT AND TERMINATION

This Agreement shall enter into force upon signature, remain in force for five years, and be automatically extended for further five-year periods unless either Party notifies the other in writing three months prior to expiration of the first five-year period or each succeeding five-year period of its intent to terminate the Agreement. It may be amended by agreement of the Parties. This Agreement may be terminated upon a six-month advance notification in writing by the Party seeking to terminate it. Such termination shall be without prejudice to the rights which may have accrued under this Agreement to either Party up to the date of such termination. Joint efforts and experiments not completed at the expiration or termination of this Agreement may, on agreement of the Parties, be continued until their completion under the terms of this Agreement.

DONE, in duplicate, at ~~WASHINGTON~~, this 10th day of ~~JULY~~, 2002.



FOR THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA:



FOR THE NUCLEAR WASTE
MANAGEMENT ORGANIZATION OF
JAPAN:

ANNEX

PROTECTION AND DISTRIBUTION OF INTELLECTUAL PROPERTY RIGHTS AND OTHER RIGHTS OF A PROPRIETARY NATURE

1. Business-Confidential Information

A. For the purpose of this Annex, "business-confidential" information means any know-how, technical data, or technical, commercial, or financial information that meets all of the following conditions:

- (1) It is of a type customarily held in confidence for commercial reasons;
- (2) It is not generally known or publicly available from other sources;
- (3) It has not been previously made available by the owner to others without an obligation concerning its confidentiality; and
- (4) It is not already in the possession of the recipient without an obligation concerning its confidentiality.

B. Any business-confidential information will be furnished or, when created in the course of the cooperative activities under this Agreement, transferred only by mutual written agreement of the Parties to the cooperative activity concerned and will be given full protection in accordance with the laws and regulations of their respective countries.

C. Any business-confidential information will be appropriately identified before it is furnished in the course of the cooperative activities under this Agreement or, unless otherwise provided in the Implementing Arrangements, immediately upon being created. Responsibility for identifying such information will fall on the Party which furnishes it or asserts that it is to be protected. Unidentified information will be assumed not to be information to be protected, except that a Party to the cooperative activity may notify the other Party in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws and regulations of its country. Such information will thereafter be protected in accordance with subparagraph B above.

2. Ownership of Intellectual Property Rights

Between each Party and nationals of its country, the ownership of intellectual property rights will be determined in accordance with its national laws, regulations and practices.

3. Inventions

- A. For the purpose of this Annex, the "Invention" means any invention made in the course of the cooperative activities under this Agreement which is or may be patentable or otherwise protectable under the laws of the United States of America, Japan or any third country.
- B. As to an Invention, the parties to the cooperative activity concerned will take appropriate steps, in accordance with the national laws and regulations of the respective countries, with a view to realizing the following:
 - (i) If an Invention is made as a result of a cooperative activity under this Agreement that involves only the transfer or exchange of information between the parties, such as by joint meetings, seminars, or the exchange of technical reports or papers, unless otherwise provided in an applicable implementing arrangement:
 - (a) the party whose personnel make the Invention (hereinafter referred to as "the Inventing Party") or the personnel who make the Invention (hereinafter referred to as "the Inventor") have the right to obtain all rights and interests in the Invention in all countries, and
 - (b) in any country where the Inventing Party or the Inventor decides not to obtain such rights and interests, the other party has the right to do so.
 - (ii)(a) If the Invention is made by an Inventor of a party ("the Assigning Party") while assigned to another party ("the Receiving Party") in the course of programs of a cooperative activity that involve only the visit or exchange of scientists and engineers, the Inventor of the Assigning Party shall receive the rights to the said Invention and any available benefits therefrom including awards, bonuses or royalties, in accordance with terms and conditions of a standard arrangement between the Receiving Party and the Inventor except if otherwise provided in another arrangement between them.
 - (b) Upon request of the Assigning Party, the Receiving Party will promptly provide to the Assigning Party information on the terms and conditions of a standard arrangement of the Receiving Party.
 - (iii) (a) Rights to an Invention made as a result of joint research and allocation of benefits derived therefrom shall be agreed between the parties prior to the commencement of the joint research and shall be contained in the arrangements setting forth the terms and conditions of the joint research.

These rights shall be allocated taking into account the relative contributions of the parties to the creation of the Invention, the benefits of licensing by territory or for fields of use, requirements imposed by the parties' domestic laws and other factors deemed appropriate.

(b) If the parties cannot reach an agreement on rights to the Invention and allocation of benefits derived therefrom within nine months from the time they started negotiation, the matter may be referred to the Joint Committee. If the Joint Committee does not make recommendations, or the parties do not accept the recommendations, the joint research will not be initiated.

(iv) The Inventing Party will disclose promptly the Invention to the other party and furnish any documentation or information necessary to enable the other party to establish rights to which it may be entitled. The Inventing Party may ask the other party in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights or the rights of the Inventor related to the Invention. Unless otherwise agreed in writing, such restrictions will not exceed a period of six months from the date of communication of such documentation or information.

4. Copyrights

- A. Disposition of rights to copyrighted works created in the course of the cooperative activities under this Agreement will be determined in the relevant implementing arrangements.
- B. Each party to the cooperative activities under this Agreement will use its best efforts to obtain for the other party a non-exclusive, irrevocable, royalty-free license in all countries where copyright protection is available, to translate, reproduce, and publicly distribute scientific and technical journal articles, reports and books not containing any proprietary information, created in the course of such cooperative activities. All publicly distributed copies of a copyrighted work prepared under the cooperative activities under this Agreement will indicate the name of the author of the work unless the author explicitly declines to be named. When scientific and technical journal articles, reports and books not containing any proprietary information, created in the course of such cooperative activities are translated and publicly distributed, the parties concerned shall be given the opportunity to review the translation prior to its public distribution.

5. Rights to Semiconductor Chip Layout Designs

Disposition of rights to semiconductor chip layout designs created in the course of the cooperative activities under this Agreement will be determined in the relevant implementing arrangements. The parties to the cooperative activities concerned will take

appropriate steps to secure rights to semiconductor chip layout designs created in the course of the cooperative activities under this Agreement in accordance with the national laws and regulations of the respective countries.

6. Other Forms of Intellectual Property

- A. In the event that other forms of intellectual property are created in the course of cooperative activities under this Agreement and they are not protected by the laws of one Party's country, disposition of rights in that intellectual property will be determined, on an equitable basis, as described in subparagraph B below and in accordance with the laws and regulations of the respective countries.
- B. The parties to the cooperative activities will, at the request of either party, promptly consult with each other on the disposition of rights in the intellectual property referred to in subparagraph A above. The cooperative activity in question will be suspended during the consultation unless otherwise agreed by the parties. If no agreement on the disposition of said rights can be reached within a three-month period from the date of the request for consultation, the cooperative activity in question may be terminated by either party with notice to the other party. In this case, each party shall also notify its respective authority of such termination. The matter may be referred to the Joint Working Level Committee.

7. Cooperation

Each party to the cooperative activity concerned will take all necessary and appropriate steps, in accordance with the laws and regulations of its country, to provide for the cooperation of its authors and inventors which are required to carry out the provisions of this Annex. Each party to the cooperative activity concerned assumes the sole responsibility for any award or compensation that may be due its personnel in accordance with the laws and regulations of its country, provided, however, that this Annex creates no entitlement to any such award or compensation.