

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND
POSIVA OY
CONCERNING A COOPERATIVE PROGRAM
IN THE FIELD OF
RADIOACTIVE WASTE MANAGEMENT

JRR 6

The Department of Energy of the United States of America (DOE) and Posiva Oy of Finland, hereinafter collectively referred to as the "Participants",

Noting that DOE, through its Office of Civilian Radioactive Waste Management, has responsibilities relating to the disposal of spent nuclear fuel and radioactive wastes as well as research and development in the area of environmental restoration; and that Posiva Oy engages in research and development, and provides expert services in the field of nuclear waste management and final disposal activities with respect to nuclear waste generated by Finland's use of nuclear energy;

Having a mutual interest in development of radioactive waste management technology; and

Desiring to cooperate in the exchange of information concerning radioactive waste management, including information relating to disposal alternatives for separated waste products and spent fuel;

Have reached the following understanding:

Article 1 Objective

- 1.1 Cooperation under this Memorandum of Understanding (MOU) is to be directed towards a study of topics associated with the management of radioactive waste and related activities of the nuclear fuel cycle.
- 1.2 Cooperation between the Participants is to be on the basis of mutual benefit, equality and reciprocity.

Article 2 Areas of Cooperation

The areas of cooperation covered by this MOU may include the exchange of information and joint study of:

- 2.1. Preparation and packaging of waste forms;
- 2.2. Surface and subsurface storage;
- 2.3. Characterization of geologic formations;
- 2.4. Field and laboratory testing to support geologic characterization;
- 2.5. Operational considerations related to waste packaging, handling, storage and transportation;

- 2.6. Environmental and safety considerations related to the development of waste management facilities;
- 2.7. Institutional and public involvement issues; and
- 2.8. Such other areas as may be mutually agreed to by the Participants, in writing.

Article 3
Forms of Cooperation

The forms of cooperation may include the following:

- 3.1. Exchange of scientists, engineers and other specialists in accordance with Article 5 of this MOU.
- 3.2. Exchange of samples, materials, instruments and components for testing.
- 3.3. Exchange, on a current basis, of scientific and technical information, and results and methods of research and development.
- 3.4. The organization of seminars and other meetings on specific agreed topics concerning waste management technologies in the areas listed in Article 2.
- 3.5. Short visits by specialist teams or individuals to the other Participant.
- 3.6. Joint projects in the form of experiments, tests, designs, analysis, or other technical collaborative activities. Such joint projects would be implemented by the Coordinators and executed by both Participants in accordance with Article 4.
- 3.7. Such other specific forms of cooperation as may be added by the Participants by agreement in writing.

Article 4
Management

- 4.1. Each Participant is to name one Coordinator to supervise the execution of this MOU. The Coordinators should meet to evaluate the status of, and proposals for, cooperation under this MOU as the Participants deem necessary. Unless otherwise agreed, meetings are to be held alternately in Finland and the United States.
- 4.2. Evaluations of the status of cooperation should include:
 - a. a review of the status of each Participant's radioactive waste management program and program plans; and

- b. an assessment of the mutual benefits of exchanges in the various areas of cooperation listed in Article 2, and consideration of measures designed to ensure that such exchanges are mutually beneficial.
- 4.3. The Coordinators are to consider proposals for joint projects. If it is decided to conduct a project under this MOU that may involve the sharing of costs or that may give rise to intellectual property, such project should be described in writing in a project annex, which should contain all necessary detailed provisions for implementing the project, including funding, intellectual property rights, exchange of equipment and personnel, and the dissemination of information. Each such project annex should refer to this MOU.
- 4.4. Each Coordinator is to designate one Technical Director to oversee the daily implementation of this MOU. Subject to project annexes arranged pursuant to Article 4.3. above, the Technical Directors are to agree on specific programs of cooperation within the policy guidelines set by the Coordinators. Each Technical Director, or his or her designee, is to be responsible for the working contacts between the Participants.

Article 5 Assignment of Personnel

The following provisions are to apply to exchanges of personnel under this MOU:

- 5.1. Each Participant should select qualified staff for assignment to the other Participant.
- 5.2. The Participants are to agree, in a separate staff attachment agreement, to each attachment of staff.
- 5.3. Each Participant is to be responsible for the salaries, insurance and allowances to be paid to its staff.
- 5.4. Each Participant is to pay for the travel and living expenses of its staff while on assignment to the host Participant unless otherwise agreed by the Participants in writing.
- 5.5. The host Participant should help locate acceptable accommodations for the other Participant's staff and for their families, or its contractors, on a mutually agreeable, reciprocal basis.
- 5.6. The host Participant should provide all necessary assistance to the assigned personnel and their families regarding administrative formalities such as assistance in making visa applications and travel arrangements and obtaining work permits.

- 5.7. The assigned staff of each Participant are to conform to the general and special rules of work and safety regulations in force at the host Participant's establishment or as agreed in a separate staff attachment agreement.

Article 6
Intellectual Property Rights and Dissemination of
Business-Confidential Information

- 6.1. If the Participants determine that a particular activity may lead to the creation of intellectual property, they will consult with each other and make appropriate written arrangements for the protection and allocation of such intellectual property.
- 6.2. In the event that information identified in a timely fashion as business-confidential is furnished or created under this MOU, each Participant is to protect such information in accordance with applicable laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, and the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.

Article 7
Additional Organizations

Each Participant may invite other governmental agencies and institutions and public and private organizations in their respective countries to participate in cooperative activities under the MOU, at their own expense, and subject to such terms and conditions as the Participants to this MOU may agree.

Article 8
Exchange of Equipment and Supplies

By mutual agreement, a Participant may provide equipment to be utilized in a joint activity. In that event, the following provisions are to apply:

- 8.1. The sending Participant should supply as soon as possible a detailed list of the equipment to be provided together with the associated specifications and technical information documentation, related to the use, maintenance, and repair of the equipment.
- 8.2. The equipment, spare parts, and documentation supplied by the sending Participant are to remain the property of the sending Participant and are to be returned to the sending Participant upon completion of the mutually agreed upon

activity unless otherwise agreed and, subject to Articles 8.4 and 8.5 below, shall be insured by the sending Participant.

- 8.3. The host establishment is to provide the necessary premises and shelter for the equipment, and provide for utilities such as electric power, water, and gas, in accordance with all technical requirements which are to be as mutually agreed upon.
- 8.4. Responsibility for expenses, safekeeping and insurance during the transport of the material from the original location in the country of the sending Participant to the place of entry in the country of the receiving Participant rests with the sending Participant. If the sending Participant elects to have the material returned, it is to be responsible for expenses, safekeeping, and insurance during the transport of the material from the original point of entry in the country of the receiving Participant to the final destination in the country of the sending Participant.
- 8.5. Responsibility for expenses, safekeeping, and insurance during the transport of the material from the place of entry in the country of the receiving Participant to the final destination in the country of the receiving Participant rests with the receiving Participant. If the sending Participant elects to have the material returned, the receiving Participant is responsible for expenses, safekeeping, and insurance during the transport of the material from the final destination in the country of the receiving Participant to the original point of entry in the country of the receiving Participant.
- 8.6. The equipment provided by the sending Participant for carrying out mutually agreed-upon activities is to be considered to be scientific, not having a commercial character.

Article 9 Samples and Materials

Unless otherwise agreed in writing, the following provisions are to apply to the transportation and use of samples and materials provided by one Participant to the other under this MOU:

- 9.1. All samples and materials provided by the sending Participant to the receiving Participant are to remain the property of the sending Participant, and are to be returned to the sending Participant upon completion of the mutually agreed upon activity.
- 9.2. Where one Participant provides samples or materials to the other Participant at the request of the other Participant, the Participant making the request is to bear all costs and expenses associated with the transportation of the sample or material from the location of the sending Participant to the final destination.

- 9.3. Each Participant is to promptly disclose to the other Participant all information arising from the examination or testing of samples or materials exchanged under this MOU. The Participants understand that business-confidential information as defined in Article 6.2., which was developed prior to or outside the scope of this MOU, is to remain business-confidential even though it is contained in the results of an examination or testing of samples or materials. Such information should be identified as business-confidential by the Participant asserting its business-confidential nature as soon as possible after disclosure of all information arising from the examination or testing is made to such Participant and the other Participant should be immediately advised of that identification. All information identified as business-confidential is to be controlled as provided in Article 6.2. It is further understood and agreed that one Participant providing samples or materials to the other Participant may also provide a partial or complete list of the types of information arising from the examination or testing of such samples or materials and which is business-confidential as defined in Article 6.2.

Article 10

Transfer of Information and Equipment

All information or equipment transferred by one Participant to the other Participant under this MOU should be appropriate and accurate to the best knowledge and belief of the transmitting Participant, but the transmitting Participant does not warrant the suitability of the information or equipment transmitted for any particular use of application by the receiving Participant or any third party. Information or equipment jointly developed by the Participants should be appropriate and accurate to the best knowledge and belief of both Participants. Neither Participant warrants the accuracy of the jointly-developed information or the appropriateness of equipment or its suitability for any particular use or application by either Participant or by any third party.

Article 11

General Provisions

- 11.1. Each Participant is to conduct the activities provided for under this MOU in accordance with the applicable laws and regulations of its respective country. All questions related to the interpretation of the MOU arising during its term are to be settled by consultation between the Participants.
- 11.2. Except when otherwise specifically agreed in writing, all costs resulting from cooperation under this MOU are to be borne by the Participant that incurs them. The DOE's ability to implement this MOU is subject to the availability of appropriated funds.
- 11.3. It is understood that this MOU does not create any legally binding obligations between the Participants.

Article 12
Effective Date, Amendment and Termination

- 12.1. Cooperation under this MOU may commence upon signature and continue for 5 years. Subject to Article 12.2, this MOU is to be automatically renewed for further 5-year periods unless either Participant notifies the other in writing at least 6 months prior to the expiration of the first 5-year period or any succeeding 5-year period of its intent to terminate the MOU. The MOU may be amended in writing by the Participants.
- 12.2. This MOU may be terminated at any time at the discretion of either Participant, upon 6 months advance notification in writing to the other Participant .
- 12.3. All joint efforts and experiments not completed at the expiration or termination of this MOU may be continued until their completion under the terms of this MOU.

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



Date: 24 November 2003

FOR POSIVA OY :



Date: 30 October 2003

