

No. 19248

**UNITED STATES OF AMERICA
and
CANADA**

**Memorandum of Understanding for co-operation in the re-
search and development of tar sands (oil sands) and
heavy oil. Signed at Washington, Edmonton, Regina
and Ottawa on 4 June 1979**

Authentic text: English.

Registered by the United States of America on 7 November 1980.

**ÉTATS-UNIS D'AMÉRIQUE
et
CANADA**

**Mémorandum d'accord pour la coopération en vue de la
recherche et de l'exploitation des sables bitumineux (pé-
trolifères) et des huiles lourdes. Signé à Washington,
Edmonton, Regina et Ottawa le 4 juin 1979**

Texte authentique : anglais.

Enregistré par les États-Unis d'Amérique le 7 novembre 1980.

MEMORANDUM OF UNDERSTANDING¹ FOR COOPERATION IN THE RESEARCH AND DEVELOPMENT OF TAR SANDS (OIL SANDS) AND HEAVY OIL BETWEEN THE ALBERTA OIL SANDS TECHNOLOGY AND RESEARCH AUTHORITY OF THE PROVINCE OF ALBERTA, THE DEPARTMENT OF ENERGY, MINES AND RESOURCES OF CANADA, THE DEPARTMENT OF MINERAL RESOURCES OF THE PROVINCE OF SASKATCHEWAN, FOR CANADA, AND THE DEPARTMENT OF ENERGY OF THE UNITED STATES FOR THE UNITED STATES OF AMERICA (hereinafter called the “Participants”)

Recognizing their mutual interest in the utilization of tar sands and heavy oil, and desiring to exchange information and to further the development of processes and equipment concerned with tar sands and heavy oil;

Bearing in mind efforts of both countries to encourage international cooperation in the general field of energy research and development under both bilateral and multilateral arrangements;

Recognizing that appreciable resources of tar sands and heavy oils also occur in other and usually less developed countries;

Have agreed on the following:

Article 1. The objective of this Memorandum of Understanding is to establish a framework for a program of cooperation between the Participants in research and development activities in the field of tar sands and heavy oil extraction, processing and related technologies.

The areas and forms of cooperation are listed under articles 2 and 3 respectively.

Article 2. The areas of cooperation covered by this Memorandum of Understanding may include:

1. Parametric analysis of tar sands and heavy oil characteristics.
2. Comparative economics and sweep efficiencies of steam flooding and in situ combustion methods.
3. Permeability-enhancement methods.
4. Treatment and use of water produced during tar sands and heavy oil development.
5. Steam flooding with additives (steam with a twist—SWAT).
6. Laboratory and field project reviews.

Other areas may be added by the Participants by mutual agreement in writing.

Article 3. Cooperation in accordance with this Memorandum of Understanding may include but is not limited to the following forms:

1. Exchange of scientists, engineers and other specialists.
2. The planning, coordination and conduct of research and development and demonstration projects through task-sharing arrangements and joint funding as agreed by any of the Participants. Each joint project would be implemented subject to a separate memorandum executed by those Participants in that joint project.
3. Exchange, on a current basis, of scientific and technical information, and results and methods of research and development.

¹ Came into force on 4 June 1979 by signature, in accordance with article 9 (1).

4. The organization of seminars and other meetings on specific agreed topics concerning tar sands and heavy oil in the areas listed in article 2, in a manner agreed by the Coordinating Committee (article 4).
5. Short visits by specialist teams or individuals to the tar sands and heavy oil research facilities and test sites of the other Participants.
6. Joint testing in facilities located in each country.

Other specific forms of cooperation may be added by the Participants by mutual agreement in writing.

Each of the foregoing form of cooperation shall require an implementing agreement setting forth the details of such cooperation.

Article 4. 1. To supervise the execution of this Memorandum of Understanding, the Participants will establish a Coordinating Committee:

- (a) Each country will designate up to five members for the Coordinating Committee; co-chairmen will be nominated by Canada and the United States. The Committee will meet as necessary but normally twice each year at locations mutually agreed upon, in Canada and the United States, alternately.
- (b) The Coordinating Committee will have as its general objective the following goals:
 - To optimize the efforts of the Participants devoted to resolving outstanding technological problems inhibiting the production and utilization of oil from tar sands and heavy oil;
 - To reduce the technical risks to any of the Participants when new technologies are introduced into this field;
 - To shorten the time needed to develop and introduce new technologies in this field.
- (c) The Coordinating Committee will be informed by each Participant of its own research, development and demonstration plans at the earliest time possible in the respective planning stages to the extent legally allowable or practically feasible to permit all Participants to comment critically on each of these plans so as to enable all Participants to take into account the intentions of the others in their own program planning procedures.
- (d) The Coordinating Committee will identify studies and projects suitable for cooperation and prepare the basis of agreement and management structure appropriate to each. In general, initial summaries should be prepared by one or more of the Participants in the following format for formal consideration by the Coordinating Committee: these short documents (5-6 pages) should provide relevant information under the following headings:
 - Objective study or project;
 - Background, including pre-existing proprietary or non-proprietary information;
 - Description of specific proposal;
 - Projected cost level and method of financing proposed;
 - Time-frame for study or project;
 - Management approach.

In addition, special licensing considerations are to be noted.

If it is decided to undertake any such studies and projects, such studies and projects shall require an implementing agreement setting forth the details of implementation of cooperation.

- (e) The Coordinating Committee will report at least annually on its activities to the heads of the departments and agencies who are the Participants to this Memorandum of Understanding.

Article 5. The Participants recognize the need to agree upon provisions concerning information, copyrights and treatment of inventions or discoveries made or conceived in the course of or under any implementing agreement entered into in accordance with this Memorandum of Understanding. Accordingly, specific provisions relating to these concerns shall be set forth in each such implementing agreement.

Article 6. The provisions of this Memorandum of Understanding shall not affect the rights or duties of the Participants hereto under other agreements or arrangements. This Memorandum of Understanding also in no way precludes commercial firms or other legally constituted enterprises in each of the two countries from engaging in commercial dealings in accordance with the applicable laws of each country; nor does it preclude the Participants from engaging in activities with other governments or persons. Moreover, it is expected that the present Memorandum of Understanding shall facilitate industrial and commercial exchanges in the field of tar sands and heavy oil between the firms of the countries of the Participants with a view to mutual benefits from such exchanges for both countries. The Participants shall coordinate contracts and arrangements involving commercial firms in their respective countries when such firms or enterprises act on behalf of their respective governments under the terms of this Memorandum of Understanding. It is understood that all such contracts and arrangements shall conform with applicable laws and regulations under which each Participant operates.

Article 7. Cooperation under this Memorandum of Understanding shall be in accordance with laws of the respective countries and the regulations of the respective Participants. All questions related to the Memorandum of Understanding arising during its term shall be settled by the Participants by mutual agreement.

Article 8. Except when otherwise specifically agreed at the time, all costs resulting from cooperation under this Memorandum of Understanding shall be borne by the Participant that incurs them. The implementation of this Memorandum of Understanding will be subject to the availability of appropriated funds.

Article 9. 1. This Memorandum of Understanding shall enter into force upon signature and continue for a five (5)-year period. This Memorandum of Understanding may be extended by written agreement by the Participants following a review of accomplishments under the Memorandum of Understanding.

2. Any Participant may withdraw from this agreement upon six months written notice, sent to the Coordinating Committee, but such withdrawing Participant

- (i) Agrees to leave with other Participants all data and technical information exchanged prior to withdrawal; and
- (ii) Agrees to handle all data and technical information it has received from the other Participants and guard it from all disclosure to others in accordance with provisions of the implementing agreements under which the data and technical information was received.
- (iii) Agrees to continue its participation in any study or project underway at the time of its withdrawal from this Memorandum of Understanding, subject to the withdrawal arrangements agreed in respect to any individual study or project.

Withdrawal by the United States will result in the termination of the MOU.

3. In the event that, during the period of this Memorandum of Understanding the nature of any Participant's tar sands and heavy oil programs should change substantially whether this be by substantial expansion, reduction, transformation or amalgamation of major elements with the tar sands and heavy oil programs of a third party, any Participant shall have the right to request revisions in the scope and/or terms of this Memorandum of Understanding.

4. All joint efforts and experiments begun but not completed at the expiration or termination of this Memorandum of Understanding may be continued until their completion under the terms of this Memorandum of Understanding.

DONE this fourth day of June 1979 at Washington, D.C., USA, and Edmonton, Regina, and Ottawa, Canada.

For the United States of America:
Department of Energy,

[Signed]

Name: JOHN F. O'LEARY

Title: Deputy Secretary

For Canada:

Alberta Oil Sands Technology
and Research Authority,

Name: [Signed — Signé]¹

Title: Chairman

[Signed — Signé]²

Approved by:

[Signed — Signé]³

For the Minister of Federal and Intergovernmental Affairs of the Province of Alberta

Department of Energy,
Mines and Resources of Canada,

Name: [Signed — Signé]⁴

Title: Deputy Minister

Department of Mineral Resources
of Saskatchewan,

[Signed]

Name: JOHN R. MESSER

Title: Minister

¹ Signed by C. W. Bowman — Signé par C. W. Bowman.

² Signed by M. A. Carrigy — Signé par M. A. Carrigy.

³ Signed by J. Peter Meekison — Signé par J. Peter Meekison.

⁴ Signed by Ian A. Stewart — Signé par Ian A. Stewart.