JOINT RESEARCH PROJECT AGREEMENT
(JRPA)

December 2003
1. **INTRODUCTION**

The United States Coast Guard and the Canadian Coast Guard, hereinafter referred to as the “Participants,” have been recognized by their respective Governments as having primary responsibility for responding to oil pollution events in the marine environment. The participants enter this Joint Research Project Agreement (hereinafter referred to as the JRPA) in order to establish a cooperative framework for conducting joint research involving pollution control and response research and development.

2. **OVERALL OBJECTIVE**

The overall objective of the JRPA is to increase the effectiveness of the United States and Canadian research programs, through joint research projects, information exchange, program coordination, visits to experimental facilities, and joint assessments affecting the ability of current inventory holdings to pump extremely viscous oils.

3. **PROJECT OBJECTIVE**

This JRPA is directed specifically towards the development, test and evaluation of viscous oil pumping systems currently held in Canadian Coast Guard and United States Coast Guard inventories for the recovery and pumping of extremely viscous oil products resulting from spills of Orimulsion® and heavy fuel oils. Subsequent test results may require the further testing and evaluation of viscous oil pumping systems.

4. **METHODS OF COOPERATION**

4.1 **General:** The following general methods of cooperation will be utilized under this JRPA:

4.1 a) Both participants will exchange reports embodying significant research results for their activities subject to restrictions on distribution of proprietary or other sensitive data.

4.1 b) Both participants will cooperate to ensure that evaluation and data collection techniques are mutually compatible insofar as the goals and scope of each evaluation allows.
4.1c) Both participants will cooperate in studies to evaluate the benefits and cost of further field or laboratory experimentation.

5. PROJECT BACKGROUND

The United States Coast Guard and the Canadian Coast Guard have regulatory responsibilities in the area of spilled oil recovery. This requires conducting research, development, test and evaluation to become familiar with the current technology, promote the advancement of technology, and provide equipment performance data of current holdings of viscous oil pumping systems in both Coast Guards’ inventories. Since there are many systems of common interest to both agencies, it is more effective and efficient to conduct joint projects.

6. PROJECT OFFICERS

6.1 Designation:

For Canadian Coast Guard, Fisheries & Oceans:

Mr. Ron MacKay
Safety and Environmental Response Systems
Canadian Coast Guard
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For U.S. Coast Guard:

Lieutenant Commander Peter C. Nourse, PE
U.S. Coast Guard Headquarters
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6.2 Responsibilities: Project Officers will be responsible for the achievement of the tasks and objectives set out in this JRPA and will be scheduled to review the status and ensure the timely completion of all tasks.

7. COORDINATION MEETINGS

Coordination meetings will be scheduled regularly to review the status and ensure the timely completion of all tasks.

8. JOINT PROJECT GOALS

The participants will jointly test and evaluate current inventory holdings of viscous oil pumping systems on extremely viscous oils at CENAC Towing, Inc. (host facility). These tests will investigate various attributes and characteristics of pumps within the Canadian and United States Coast Guards with the new steam/hot water injection flanges and
water lubrication technologies. Two manufacturers of extremely viscous oil pumps have accepted to test and evaluate one of their pumps and injection flanges for comparison and data exchange.

For the Canadian Coast Guard:
The tests will be focused on extremely viscous fuel oils and recovered bitumen resulting from spills of Orimulsion®. Seventy barrels of bitumen having a viscosity of 500k to 1000k cSt at 10 deg. C will be required. The pumps to be tested will be GT-185 and GT-260 c/w steam/hot water inlet and discharge injection flanges and newly developed and strengthened platewheel. The Canadian objective is to pump this extremely viscous bitumen a distance of five hundred feet with an operational flow rate of 10 cu. meters/hr. for the Gt-185 and 20 cu. meters/hr. for the GT-260.

For the United States Coast Guard:
Tests will be focused on very viscous heavy fuel oils. Seven hundred barrels of heavy fuel oil having a viscosity of 200k cSt at 10 deg. C will be required. The pump to be tested will be the Viscous Oil Pumping System (VOPS) that utilizes DOP–160 and 250 pumps. The United States objective is to pump this heavy fuel oil one thousand five hundred feet.

9. REPORTING PROCEDURES
Reports on JRPA will be prepared by the lead engineer, with input and review by both Coast Guards, represented manufacturers, consultants, and other sponsors and stakeholders attending the test. The final report will be approved and submitted by project offices to the Director, Safety and Environmental Response Systems (CCG) and the Chief, Office of Civil Engineering (USCG), reporting the results of meetings and progress achieved.

10. FINANCIAL ARRANGEMENTS
10.1 All arrangements are subject to the availability of funds within each agency.
10.2 Each participant will bear the direct costs of its own personnel, as well as, the cost of any language service it requires.
10.3 This JRPA does not envisage the transfer of funds from one agency to the other.
10.4 To the extent available, the host country will provide office space and other support services for the resident specialists of the other participant as may be agreed upon by the Project Officers.

11. DISCLOSURE OF INFORMATION
Both participants shall make clear to all private firms and other government agencies participating in specific tasks, the fact that all information provided at review meetings will become publicly available, except to the extent that either agency may request that the information not be available to the public and that withholding the information is consistent with applicable domestic laws and regulations.
12. **LIABILITY**

Both participants will make every effort to ensure the accuracy of all data, but the accuracy of such data is not guaranteed. Each participant will use the other’s data and analysis at its own risk and will not hold the other agency responsible in the event of claims arising out of the use of said data and analysis.

13. **APPLICATION OF THIS JPRA**

13.1 This JPRA is not intended to create binding obligations under international law.

13.2 Nothing in this JPRA is intended to affect in any way rights and duties based on international agreements or other arrangements pertaining to the participants or their respective Governments. Nothing in this JPRA is intended to conflict with current law or regulations of the United States or Canada, and if a term in this agreement is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.

13.3 Any dispute regarding the interpretation or implementation of this JPRA, or any associated arrangements, will be resolved by consultation among the participants and will not referred to an international body or third party for settlement.

14. **DURATION, WITHDRAWAL, AND TERMINATION**

14.1 This JPRA will come into effect upon signing, and will remain in effect until completion of the Joint Project Goals specified in paragraph 8 or until terminated by either participant.

14.2 Either Participant may withdraw from the JPRA, by giving written notification to the other participant, with a termination date of at least sixty days.

14.3 Any task sharing or cost sharing projects ongoing at the time of termination will be completed in accordance with their original agreed terms and schedules.

14.4 This JPRA may be amended at any time by mutual agreement, in writing.

Signed at Washington, DC
For the United States Coast Guard:
ERROLL BROWN
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Systems

Signed at Ottawa, ON
For Fisheries & Oceans/ Canadian Coast Guard:
CHARLES GADULA
Director General,
Marine Programs

Date: Date: