

Project Number: 040775

Project Title: Applied Research Related to Lingering Oil, Resource Recovery, and Management and Monitoring of Impaired Water Bodies

PI Name: Lucinda Jacobs, Integral Consulting, Inc.

Time Period Covered by Report: May – August 15, 2004

Date of Report: June 14, 2005

1. Work Performed:

Task 1: Project Scoping and Meetings— Scoping activities include initial document compilation and review; meetings and discussions with ADEC staff, Trustee council members, and agency scientists; and identification of the different library resources, technical experts, and data/mapping sources to determine what available work on resource characterization, monitoring design, and restoration should be incorporated into this applied research. Integral staff traveled to Anchorage to participate in meetings on February 5 (scoping) and on March 1, 2004 (outstanding issues related to lingering oil).

Task 2: Evaluate Lingering Oil Studies— Publications and reports by Jeff Short, Stanley Rice, and others were reviewed to assess the strengths and weaknesses of the technical approach, statistical design and interpretation, and to characterize the inherent uncertainty of the technical findings regarding the presence, amount, and bioavailability of lingering oil. Related work and analyses performed by David Page, Paul Boehm, and others was also evaluated. This task included research to identify and obtain key reference documents and development of a project library to readily access those publications. The framework for evaluating lingering oil was developed and integrated into a work plan and schedule, which was submitted on July 8, 2004.

Task 3: Evaluate Resources Injury and Recovery—Under this task, Integral staff independently assess work performed related to the various factors affecting resources and habitat in Prince Williams Sound (and other areas affected by the oil spill), distill the information to the core technical arguments, and reassess the technical basis for the recovery status classification (recovering, not recovered). A detailed approach to evaluating lingering oil, resource injury, and recovery was developed and provided in the *Work Plan for the 2004 Assessment of Lingering Oil and Resource Injuries from the Exxon Valdez Oil Spill* (Integral 2004), submitted on July 8, 2004.

Two conceptual models were developed, a physical-chemical model of oil distribution and bioavailability and a biological model of resource exposure and injury. The draft *Conceptual Exposure Model* (CEM) report was completed and submitted on August 3.

Task 4: Identify Areas of Concern—Information relevant to the identification of areas of concern is being identified, reviewed, and distilled to develop a map or series of maps of current shorelines, shoreline areas, adjacent water bodies, and sediment areas of concern due to lingering oil. This work is directly related to the lingering oil and resource evaluations being performed under Task 3.

Task 5: Develop a Long-term Monitoring and Management Plan—Work under this task has not yet been initiated.

Task 6: Development of Restoration Options— Work under this task has not yet been initiated.

Task 7: Public Communication—Work under this task has not yet been initiated.

2. Future Work: Work continues on the *2004 Assessment of Lingering Oil in Prince William Sound* and on resource status reports for Killer Whale, Harlequin Duck, Sea Birds, Pacific Herring, Harbor Seal, and Sea Otter. Deadlines for submittal of the technical report containing these analyses have been extended to December 2005 to accommodate delays in obtaining information from Trustee scientists.

3. Coordination/Collaboration: Lingering oil and resource evaluations involve routine communication with Trustee scientists who are conducting research related to lingering oil, Harlequin duck, sea otter, and other injured resources.

4. Community Involvement/TEK and Resource Management Applications: Not applicable.

5. Information Transfer: This project was initiated in spring 2004. A report will be prepared in December 2005.

6. Budget: As of August 2004, there were no changes to the budget of \$650,000.



Signature of PI: _____

Project Web Site Address: www.integral-corp.com