



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

June 8, 2006

Randall A. Bates  
Acting Director  
Office of Project Management and Permitting  
P.O. Box 111030  
Juneau, AK 99811-1030

Dear Mr. Bates:

Enclosed, for your signature, is a memorandum of agreement (MOA) between the National Marine Fisheries Service (NMFS) and the Alaska Department of Natural Resources (ADNR) for monitoring the marine habitats in Berners Bay, Alaska, and the effects of commercial development on those habitats. The information from this monitoring project will provide a better understanding of habitat status and change. NMFS appreciates Tom Crafford's assistance in drafting this agreement and the opportunity to work with ADNR on this important project. The MOA is subject to the availability of funds and terminates on September 30, 2008.

Please return the signed MOA to Cindy Hartmann at P.O. 21668, Juneau, AK 99802. Contact Cindy Hartmann at 907 586-7585 if you have any questions or for further coordination.

Sincerely,

Robert D. Mecum  
Acting Administrator, Alaska Region

Enclosure

cc: \*Tom Crafford, ADNR, Anchorage, [tom\\_crafford@dnr.state.ak.us](mailto:tom_crafford@dnr.state.ak.us)  
\*Adam Moles, NMFS, AFSC, ABL, Juneau  
\*Jeep Rice, NMFS, AFSC, ABL, Juneau  
\*Pat Harris, NMFS, AFSC, ABL, Juneau  
\*Cindy Hartmann, NMFS, AKR, HCD, Juneau  
\*Tom Meyer, NOAA, GC, Juneau  
\*Lisa Lindeman, NOAA, GC, Juneau

\*e-mail



**MEMORANDUM OF AGREEMENT**

**BETWEEN THE**

**NATIONAL MARINE FISHERIES SERVICE  
U.S. DEPARTMENT OF COMMERCE**

**AND**

**THE ALASKA DEPARTMENT OF NATURAL RESOURCES**

**Agreement No. AKR-05-0006**

**I. PARTIES**

This document constitutes an agreement between the National Marine Fisheries Service (NMFS), U.S. Department of Commerce, and The Alaska Department of Natural Resources (ADNR).

**II. AUTHORITIES**

NMFS has authority to participate in the project with ADNR under:

- (1) 16 U.S.C. Section 661(2), the Fish and Wildlife Coordination Act (FWCA) of 1958, which permits the Secretary “to make surveys and investigations of wildlife of the public domain, including lands and waters or interests therein acquired or controlled by an agency of the United States;”
- (2) 16 U.S.C. Section 661 (3), FWCA, which authorizes the Secretary “to accept donations of land and contributions of funds in furtherance of the purposes of the said section.” These purposes include: “to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation...in the United States...;”

**III. PURPOSE**

The purpose of this Memorandum of Agreement (MOA) is for the ADNR to contribute funds to NMFS for monitoring of petroleum hydrocarbons in the marine environment in Berners Bay, Alaska. The agreement supports a monitoring study to determine baseline

concentrations of polycyclic aromatic hydrocarbons (PAHs) in nearshore waters at facilities associated with the Kensington mine and in significant areas of Berners Bay before mining operations begin. Continuing cooperative efforts may include: continued monitoring of PAHs, marine mammal monitoring; and other ecological studies in Berners Bay including habitat and forage fish studies.

This agreement establishes the understanding between NMFS and ADNR regarding use of available funds to assist in monitoring effects of development in Berners Bay. Together, NMFS and ADNR can develop and carry out monitoring in Berners Bay which will provide important resource information to regulatory agencies and to the public.

This project is necessary and essential to further the mission of the Department in that it will contribute to determining the impact of transportation and construction activities on the fisheries and aquatic resources of Berners Bay. Information from this research and monitoring project will be made available to regulatory agencies and to the public and will help to make informed decisions in resource development.

Without ADNR's contribution the project would not be able to gather and analyze as much data and would not be as comprehensive or as useful to regulatory agencies and the public.

### Background

ADNR and NMFS each have responsibilities and interest in programs that manage, conserve, enhance, and sustain biological diversity of freshwater, coastal, and marine resources.

ADNR's mission is to develop, conserve, and enhance natural resources for present and future Alaskans. The ADNR is the lead State agency for all matters relating to the exploration, development, and management of mining. In its capacity as lead agency, ADNR coordinates all regulatory matters concerning mineral resource exploration, development, mining, and associated activities.

NMFS uses science to manage, conserve, protect, restore, allow sustainable use, and promote stewardship of living freshwater, coastal, and marine resources, and the ecosystems that support them, for the benefit of the nation. NMFS strives to balance competing public needs and interests in the use and enjoyment of living marine resources while preserving their biological integrity. NMFS utilizes partnerships with other organizations to fulfill its mission.

Berners Bay is a relatively pristine marine environment in Lynn Canal north of Juneau, Alaska. The bay has sensitive habitats that are used at critical times by several species, and is a critical habitat for the upper Lynn Canal ecosystem with its herring and eulachon runs which provide a forage base for salmon and other fish, marine mammals and birds.

Several projects, currently under consideration for development, could adversely impact habitats and water quality in Berners Bay. The largest of these is the Kensington Mine project that requires construction of marine terminals in Berners Bay. Docking facilities will be constructed within Berners Bay at Cascade Point and in Slate Creek Cove. In addition, Gold Belt Inc. owns property in the Echo Cove/Berners Bay area and may develop it for commercial purposes.

The effects of the proposed marine terminals on Pacific herring and the ecosystems, in which they play a role, are difficult to predict. Development of marine facilities in Berners Bay could have a negative impact on the herring resource and on other marine resources. Because spawning herring deposit eggs on kelp, if the project reduced kelp abundance or variety that could directly affect herring spawning success. Increased disturbance from vessel traffic, transient lighting, increased turbidity and sedimentation, and increased petroleum hydrocarbons in the water from oil and/or gas spills are all concerns. Resource managers lack information regarding specific habitat factors and potential environmental stressors from development projects such as the marine terminal to fully understand the environmental consequences of development.

The high value marine resources in Berners Bay are a public resource and are important and valued by NMFS, ADNR, other agencies and organizations, and the public.

#### IV. MUTUAL INTEREST OF THE PARTIES

The parties have a mutual interest in collaboration and cooperation in coastal and marine conservation projects. This MOA will facilitate cooperation in projects to better understand and monitor coastal water quality and marine species and habitats. The monitoring of sites within and near Berners Bay for changes in water quality is of specific interest to the parties. NMFS and ADNR have interests in understanding the impact of development on water quality, particularly PAH concentrations. Other shared interests in Berners Bay include: the presence and behavior of marine mammals; herring spawning habitat and activity; the ecosystem role of herring and other forage fish; and the effects that vessel activities and construction have on nearshore fish habitat and marine mammals.

#### V. RESPONSIBILITIES OF THE PARTIES

NMFS responsibilities include performing the following activities in support of the monitoring program in Berners Bay:

- a. PAH baselines: Establish baseline concentrations of PAHs near Cascade Point and Slate Cove, sites proposed for dock facilities to service the Kensington Mine; in Echo Cove, a popular recreation site; and at control sites in and outside of Berners Bay.

b. PAH monitoring: PAH concentrations and ecological parameters will be monitored periodically during construction, operation and in the post operation phase of the two proposed facilities at impacted and control sites as described in the *Kensington Project Marine Monitoring Plan* dated May 6, 2005, and outlined in Table 1 in the attachment. The sampling frequency as required in the monitoring plan is found on pages four and eight in the plan. Page four states:

PAHs will be monitored before construction of the Cascade Point facility and during operation. Sampling will initially be conducted twice per year, during early spring and mid-summer. Early spring sampling is likely to represent the highest water quality, and will coincide with herring spawning and incubation. Summer sampling will coincide with the highest amount of recreational use of Echo Cove and Berners Bay. Monitoring will be conducted annually for five years, beginning prior to construction, and then again for one season 10 years after construction. Coeur will ensure that at least three years of monitoring is conducted during operational conditions post construction. The need for monitoring during operations beyond the first three years will be determined based on previous years results and will be approved by the State, USFS and other agencies which are a part of the Berners Bay working group.

c. Provide annual reports to ADNR and interested publics. The annual report will describe the results of the years hydrocarbon monitoring and include the following sections: abstract, introduction, study area, materials and methods, results, discussion, acknowledgements, citations, tables, figures, and appendices.

ADNR's responsibilities include contributing resources, as available, to support the monitoring activities in Berners Bay as follows:

- a. ADNR will provide a total of \$53,190 to NMFS for years two and three of the hydrocarbon monitoring study. ADNR's funds will be used to cover the items specified in Table 2 in the attachment.

## VI. FINANCIAL TERMS AND CONDITIONS

The attached estimated budget for this project displays the estimated cost of collection, analyzing, and reporting one year of baseline PAH monitoring. NMFS will bill ADNR \$26,595 for each year of hydrocarbon monitoring upon completion and submission of an annual report. The total cost covered by this agreement will not exceed \$53,190.

Available funds may vary from year to year. This agreement covers years two and three of hydrocarbon monitoring. Any additional contribution of funds by ADNR for research efforts in current or future fiscal years will be provided via amendment to this agreement.

## VII. CONTACTS

The contacts for each party to this agreement are:

Adam Moles, Senior Scientist  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Alaska Fisheries Science Center, Auke Bay Laboratory  
11305 Glacier Highway  
Juneau, AK 99802  
Phone: (907) 789-6023  
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E-Mail: [adam.moles@noaa.gov](mailto:adam.moles@noaa.gov)

Tom Crafford, Large Mine Permitting Manager  
Alaska Department of Natural Resources  
Office of Project Management and Permitting  
550 West Seventh Ave., Suite 900D  
Anchorage, AK 99501  
Phone: (907) 269-8629  
Fax: (907) 269-8930  
E-Mail: [tom\\_crafford@dnr.state.ak.us](mailto:tom_crafford@dnr.state.ak.us)

The parties agree that if there is a change regarding the information in this section, the party making the change will notify the other party in writing of such change.

## VIII. PERIOD OF AGREEMENT AND MODIFICATION/TERMINATION

This agreement will become effective when signed by both parties. The agreement will terminate on September 30, 2008, but may be amended at any time by mutual consent of the parties. Either party may terminate this agreement by providing 45 days written notice to the other party. In the event this agreement is terminated, each party shall be solely responsible for the payment of any expenses it has incurred. This agreement is subject to the availability of funds.

## IX. OTHER PROVISIONS

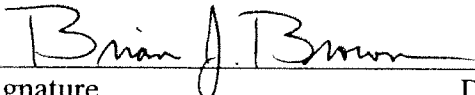
Should disagreement arise on the interpretation of the provisions of this agreement, or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement on interpretation is not reached with thirty days, the

parties shall forward the written presentation of the disagreement to respective higher officials for appropriate action.

Under the Inspector General Act of 1978, as amended, 5 USC App. 3, a review of this agreement may be conducted at any time. The Inspector General of the Department of Commerce, or any of his or her duly authorized representatives, shall have access to any pertinent books, documents, papers and records of the parties to this agreement, whether written, printed, recorded, produced, or reproduced by any mechanical, magnetic or other process or medium, in order to make audits, inspections, excerpts, transcripts, or other examinations as authorized by law.

Any materials or statements offered to inform the public of the nature of this project, or to promote the existence of the project and the parties, shall only be released to the public upon agreement from NMFS.

**The National Marine Fisheries Service**

 5/24/06  
Signature Date

William T. Hogarth, Ph.D.  
Assistant Administrator for Fisheries  
U.S. Department of Commerce  
National Marine Fisheries Service  
Silver Spring, MD 20910  
(301) 713-2239; Fax (301) 713-1949

**The Alaska Department of Natural Resources**

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Signature Date  
Randall A. Bates  
Acting Director  
Office of Project Management and Permitting  
Alaska Department of Natural Resources  
302 Gold Street, Suite 202  
P.O. Box 111030  
Juneau, AK 99811-1030  
(907) 465-3562; Fax (907) 465-3075

**ATTACHMENT to Agreement Number MOA-05-0006**

Memorandum of Agreement Between The

National Marine Fisheries Service and the Alaska Department of Natural Resources

**Table 1. Kensington Project Hydrocarbon Monitoring Plan Summary.**

| Category     | Subcategory   | Method                       | Location                     | Frequency  | Authority      | Responsible Party |
|--------------|---------------|------------------------------|------------------------------|--|----------------|-------------------|
| hydrocarbons | water         | passive integrative sampling | 10 sites (confirm locations) | Twice annually first 5 years (4 additional years), then in year 10 | Tideland Lease | ADNR and NMFS     |
|              |               | water extraction             | 5 sites (confirm locations)  | Annually first 5 years (4 additional years), then year 10          | Tideland Lease | ADNR and NMFS     |
|              | sediment      | subtidal sediment            | 3 samples at Cascade Point   | Annually first 5 years (4 additional years), then year 10          | Tideland Lease | ADNR and NMFS     |
|              | mussel tissue | intertidal composite sample  | 3 samples at Cascade Point   | Annually first 5 years (4 additional years), then year 10          | Tideland Lease | ADNR and NMFS     |

**Table 2. Annual Budget for Hydrocarbon Monitoring for Monitoring Years Two and Three.**

| Chemical Analyses      | Sample Type               | # Samples | Analysis Costs @ | Annual Cost     |
|------------------------|---------------------------|-----------|------------------|-----------------|
| Water                  | PEMD                      | 46        | 300              | 13,200          |
| Water                  | MeCL <sub>2</sub> extract | 4         | 300              | 1,200           |
| Sediment               | Sediment                  | 4         | 400              | 1,600           |
| Tissue                 | Mussel                    | 4         | 400              | 1,600           |
| Field Supplies         |                           |           |                  | 600             |
| Contract Labor         |                           |           |                  | 2,300           |
| Personnel (staff time) |                           |           |                  |                 |
| 12 person days         |                           |           |                  | 6,096           |
| <b>TOTAL</b>           |                           |           |                  | <b>\$26,595</b> |