



## Port of Juneau

June 30, 2009

Richard G. Jackson  
Regulatory Division, POA-2000-495-M3  
Department of the Army  
U.S. Army Engineer District, Alaska  
PO Box 6898  
Elmendorf AFB, Alaska 99506-0898

Subject: Douglas Boat Harbor

Dear Richard,

Please find the additional information to supplement our June 14, 2007 application for authorization to replace the moorage float system at Douglas Boat Harbor in Juneau, Alaska as requested in your November 14, 2008 letter. In addition, we are submitting all test information, including agency comments, our response to those comments, and additional evaluations.

We believe we have satisfied the 404(b)(1) guidelines and ask that you undertake steps to begin processing our application. Your authorization will allow us to remove and dispose the existing moorage float system, to reestablish the design depth and dimensions of the original moorage basin, to regrade the basin slopes on the south and west edges of the moorage basin for the purpose of increasing vessel maneuvering room within the moorage basin, and to install a replacement moorage float system.

The Army Corps constructed the moorage basin in the early 1960's. The State of Alaska and the City of Douglas installed the current moorage float system shortly thereafter. The harbor has served the community well over the years, contributing significantly to the economic and social well-being of the Juneau community and providing moorage for a variety of fishing, recreational, and visiting boats.

The City and Borough of Juneau (CBJ) Assembly and the CBJ Docks and Harbor Board decided to replace the moorage system after several years of deliberation. They concluded the moorage provided by the original Douglas Harbor is needed by the community and must be replaced. This was done in conjunction with a locally funded expansion of the harbor, undertaken to relieve an area-wide shortage of slips for vessels larger than 30 feet.

During its deliberations, CBJ found that rebuilding an existing moorage facility is more cost effective and has less environmental impact compared to building a new facility. Over the past few decades, Juneau has examined a multitude of plans to build new harbor facilities throughout the community in response to moorage shortages. This exercise has shown that new facilities are much more expensive than rebuilds of existing facilities. For example, we estimate the cost of this moorage replacement

Mr. Richard Jackson  
June 30, 2009  
Page 2 of 4

project at about \$50,000 per slip. The cost to build a new harbor facility is running about \$250,000 per slip. Also, our nation's environmental laws make permitting a new facility exponentially more difficult than a rebuild. Based on this planning work, CBJ believes that replacement of the Douglas Harbor moorage system is best for the community.

The decision to replace the moorage system at Douglas was not made lightly, since the primary source of funding is user fees levied on harbor patrons. Harbor rates are established through a political process. In our case, harbor rates were doubled to provide funding for this project; giving Juneau the highest harbor rates in Southeast Alaska and among the highest in the State. This has adversely affected the community. Several fishermen have moved to adjacent communities and cited cheaper moorage rates as their motivation. The point we want to make is that there is a political and practical limit to the amount of funding that can be generated for a project of this type.

The existing moorage system is well beyond the end of its useful life. The electrical system has life safety issues that need to be addressed as soon as possible. The moorage floats submerge during winter snows threatening the safety of persons using the floats. CBJ needs to replace the facility or shut it down.

Over the life of the floats, the seabed of the moorage basin has risen several feet due to glacial rebound. The rebound is well-documented by NOAA. In addition, marine life from the underside of moorage floats has created mounds of biomass on the seabed further reducing the depth. Groundings of vessels currently occur during low tides. Over the next 35 years, the expected design life of the replacement moorage system, we expect the harbor would become unusable during low tides due to insufficient depth. If we replace the moorage system, we have no choice but to dredge. To replace the moorage system without assuring that vessels using the harbor have adequate depth to maneuver would constitute malfeasance.

CBJ has undertaken an extensive analysis of sediments proposed to be dredged from the moorage basin. There is general acknowledgement that the only contaminant of concern is mercury. This has been demonstrated by extensive chemical testing.

With regards to mercury, the CBJ has expended considerable funds to examine the best way to deal with mercury contaminated sediments. We also hired one of the nation's leading environmental consultants to help us and the regulatory agencies understand the risk associated with the dredge sediments and to select an appropriate method for disposal. To date, we have expended in excess of \$382,000 analyzing the dredge sediments. This amounts to about \$3,200 per harbor user or about two year's of moorage charges. The level of testing performed on this project is probably unprecedented in the State of Alaska. We believe that a sufficient body of knowledge has been established to render a wise and prudent decision with regard to the management of the dredge spoils.

We would like to reiterate that CBJ has decided that Douglas Harbor must be rebuilt. We do not have the option of condemning and shutting down the facility, or building a replacement facility at a different location. This is an economic, political, and logistical reality. Next, we must dredge if we replace the

Mr. Richard Jackson  
June 30, 2009  
Page 3 of 4

float system. The harbor would be unusable without dredging. This leads us to the primary permit issue which is the examination of disposal alternatives for the dredge spoils.

Attached you will find an examination of all alternatives that we could envision for disposing of the spoils. We understand that the §230.10(b) of the 404(b)(1) Guidelines prohibit the discharge of dredged spoils into the waters of the United States if there is a practicable alternative to the proposed discharge that has less environmental effect.

According to the Guidelines, an alternative is 'considered practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.' As stated previously, we have limited funding for the project. Based on current estimates, CBJ has sufficient project funding for in-water disposal of dredge spoils in Gastineau Channel. This is also the least costly alternative.

In order to implement a more costly alternative than in-water disposal, CBJ must obtain additional funding. Under current law, this funding can come from either harbor fee increases or from tax levies imposed on the general public. Both of these actions require approval of the appointed Docks and Harbors Board, the elected Assembly and, in some cases, the voters. If this additional funding can not be obtained, then we believe it is fair to deem an alternative not "practicable" due to cost.

On June 25, 2009, the CBJ Docks and Harbors Board rigorously examined the disposal alternatives at a public meeting. The purpose of the meeting was to select an alternative and determine if the Board would undertake actions to obtain additional funding if necessary to implement an alternative. At this meeting, the Board decided not to increase harbor user fees or to ask the Assembly to increase the local tax burden in order to provide additional funding for implementing a more expensive alternative than in-water disposal of the dredge spoils. Therefore, we have determined that in-water disposal is our only practicable alternative, and by default, the least damaging practicable alternative.

As stated previously, we believe the in-water disposal alternative meets the requirements enumerated in the Guidelines for obtaining a permit. First, we are enclosing a demonstration of compliance with the state water quality standards for mercury at the boundary of the disposal area. We note that this will require us to monitor Gastineau Channel currents and dispose of sediments in the up current portion of the disposal area. To assure compliance, we suggest a permit condition to this effect which we will require pursuant to our construction contract.

Most importantly, we do not believe the discharge of dredged material will cause or contribute to significant degradation of waters of the United States. Towards this end, we examined the dredge materials in accordance with the provisions set out in the applicable regulatory manuals and the agreed upon testing protocols. We understand the manuals and protocols are intended to assist permitting authorities in making factual determinations regarding the effects of the discharge on the aquatic ecosystem, and in determining whether the discharge will comply with the Guidelines.


Based on comments from regulatory agencies, we believe there is general agreement by all parties that the acute testing (water column toxicity and benthic toxicity) shows no problems and meets the

Mr. Richard Jackson  
June 30, 2009  
Page 4 of 4

requirements of the Inland Test Manual. The benthic bioaccumulation data shows a statistic difference between the dredge spoils and the controls. This appears to be the primary concern of the regulatory agencies. As you know, the Inland Manual allows for a "case-by-case" evaluation of several factors when the bioaccumulation statistically exceeds the reference tests. In this regard, we believe the preponderance of evidence allows the Corps, EPA, and ADEC to find proposed discharge complies with the guidelines. We note the bioaccumulation is below levels established by the FDA and the State of Alaska, and the levels at which effects have been observed as established in scientific literature.

We thank you and all of the other agency representatives that have helped us develop this application. Please do not hesitate to contact me at 907-586-0294 if you have questions.

Sincerely,



John M. Stone, P.E.  
Port Director