



COOK INLETKEEPER®

PROTECTING ALASKA'S COOK INLET WATERSHED AND THE LIFE IT SUSTAINS

(VIA EMAIL ONLY)

Mayor@ci.anchorage.ak.us

March 31, 2008

Mayor Mark Begich
632 W. 6th. Ave., Suite 840
Anchorage, Alaska 99501

Dear Mayor Begich:

Attached please find a Request for Correction of Information we recently submitted to the Army Corps of Engineers under the federal Information Quality Act. Also attached please find a copy of the March 23, 2008, front page story from the Anchorage Daily News regarding proposed Port of Anchorage expansion.

As the attachments detail, there remain serious questions regarding the cost, seismic and environmental assumptions used to justify the currently proposed Port of Anchorage expansion. Members of the Anchorage Geotechnical Advisory Committee continue to have concerns about the stability of the proposed structure, and the project's rapidly rising costs raise serious questions about taxpayer financing for a project whose purpose and need have not been clearly documented.

Cook Inletkeeper recognizes the vital importance of the Port of Anchorage to local, regional and statewide commerce, and we support alternative expansion plans based on demonstrated need for the facility. A project of this size and cost, however, requires the careful attention and scrutiny we feel it has lacked to date.

Accordingly, we urge you to convene a truly objective panel of experts on municipal finance, Port operations and funding, and seismic stability before any additional resources are committed to this effort. Specifically, we ask that you seek a delay for the public hearing scheduled for April 15, 2008, on AR 2008-61, which seeks additional bonded indebtedness for Port of Anchorage expansion, until an independent review has been completed and full project funding can be accurately identified.

Thank you for your attention to this important matter, and we encourage you to take the steps necessary to ensure Alaskans will be proud of the Port of Anchorage expansion for years to come.

Very truly yours,

A handwritten signature in black ink, appearing to read "Bob Shavelson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bob Shavelson
Executive Director

Enc. Request for Correction of Information
Does Alaska need a \$700 million port? (Anchorage Daily News 3/23/08)

Cc: (VIA EMAIL ONLY)
Michael Carter, MARAD
Governor Sarah Palin, State of Alaska
Bill Sheffield, Port of Anchorage
Anchorage Assembly
Anchorage Port Commission
Anchorage Area Legislators

TRUSTEES FOR ALASKA

A Nonprofit Public Interest Law Firm Providing Counsel to Protect and Sustain Alaska's Environment

1026 W. 4th Ave., Suite 201 Anchorage, AK 99501 (907) 276-4244 (907) 276-7110 Fax

March 28, 2008

By overnight Fed Ex to:

U.S. Army Corps of Engineers
USACE Information Quality Act
Attn: Corporate Information, CECI-A
441 G Street, NW
Washington, D.C., 20314-1000

Re: Request for Correction of Information Concerning the Port of Anchorage
Expansion Project Stated in the U.S. Army Corps of Engineers Alaska
District *Department of the Army Permit Evaluation and Decision Document*
- *Application No. POA-2003-502-N* (August 10, 2007)

Dear Sir or Madam:

Please accept this Request for Correction of Information submitted on behalf of Cook Inletkeeper, the Alaska Public Interest Research Group, and Alaska Center for the Environment ("requestors").

I. INTRODUCTION

The requestors ask the Corps of Engineers Corporate Information office to correct certain information in the U.S. Army Corps of Engineers, Alaska District's *Public Notice and Department of the Army Permit Evaluation and Decision Document - Application No. POA-2003-502-N* (August 10, 2007) ("Decision Document"),¹ and in the meantime to revoke the above-referenced Permit. This Request for Correction of Information is filed pursuant to Public Law 106-554, § 1(a)(3) [Title V § 515], Stat. 2763 (2000), *reprinted* at 44 U.S.C. § 3516, note, commonly known as the Data or Information Quality Act ("IQA").²

¹ The Decision Document, Permit, Public Notice, and Exhibits referenced herein are on the enclosed electronic diskette.

² The IQA states in pertinent part:

The Permit was granted to the Municipality of Anchorage's Port of Anchorage ("POA"). The POA is located on the Knik Arm of upper Cook Inlet, Alaska. The Permit authorizes a huge expansion of the POA. The Decision Document contains the Alaska District's analysis of the POA expansion project's impacts. The analysis was required by Section 404 of the Clean Water Act ("CWA"), 33 U.S.C. § 1344, Section 10 of the Rivers and Harbors Act, 33 U.S.C. § 403, the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332 *et seq.*, and the Magnuson Stevens Fisheries Conservation and Management Act of 1966 ("Magnuson Stevens Act"), 16 U.S.C. § 1801 *et seq.*

The POA expansion project will cause significant and long lasting adverse environmental impacts to the waters, fish, marine mammals, terrestrial wildlife, wetlands, tidal lands, and sub-tidal lands of upper Cook Inlet. In addition, over 50% of the project's construction costs will be paid for by the federal government. For these reasons, it was extremely important that the public, the Alaska District and other interested agencies receive and use accurate information about the project during consideration of the proposed Permit.

Because the Alaska District declined to make a draft Decision Document available for public review and comment, however, the public had no opportunity to critique the quality of the information the Alaska District received from the permit applicant or which the Alaska District used in making its decision approving the project. As it turns out, the information in the Public Notice for the Permit and in the Decision Document and otherwise relied upon by the Alaska District in making its permit decision falls well short of the information quality standards issued under the IQA. Consequently, requestors seek correction of that information and a reversal of the Alaska District's decision to grant the Permit.

(a) The Director of the Office of Management and Budget shall ... issue guidelines under sections 3504(d)(1) and 3516 of title 44, United States Code, that provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies in fulfillment of the purposes and provisions of chapter 35 of title 44, United States Code, commonly referred to as the Paperwork Reduction Act.

(b) The guidelines under subsection (a) shall--

(1) apply to the sharing by Federal agencies of, and access to, information disseminated by Federal agencies; and

(2) Require that each Federal agency to which the guidelines apply--

(A) issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency, by not later than 1 year after the date of issuance of the guidelines under subsection (a);

(B) establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency that does not comply with the guidelines issued under subsection (a)

44 U.S.C. § 3516, note.

II. THE INFORMATION QUALITY STANDARDS

The information quality standards are set out in the Office of Management and Budget Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8451 (Feb. 22, 2002) (“OMB Guidelines”) and Section 3.3.4 of Attachment 1 of the Deputy Secretary of Defense's Memorandum “Ensuring the Quality of Information Disseminated to the Public by the Department of Defense,” Policy and Procedural Guidance (Feb. 10, 2003) (“DOD Guidance”). “Three substantive terms describe the quality of information disseminated by DoD and Components: utility, objectivity, and integrity.” *Id.* at 2. The “basic standard of quality (objectivity, utility, and integrity) must be maintained and appropriate steps taken to incorporate information quality criteria into DoD public information dissemination practices.” Memorandum for Secretaries of the Military Departments, *et al.*, “Ensuring Quality of Information Disseminated to the Public by the Department of Defense,” U01678-03 (Feb. 10, 2003), at 1.

Under the OMB Guidelines,

With regard to analysis of risks to human health, safety and the environment maintained or disseminated by the agencies, agencies shall either adopt or adapt the quality principles applied by Congress to risk information used and disseminated pursuant to the Safe Drinking Water Act Amendments of 1996... .

Id., 67 Fed. Reg. at 8460. That duty is implemented in the DOD Guidance as follows:

With regard to analysis of risks to health, safety or the environment that DoD Components disseminate, DoD Components will adopt or adapt as appropriate to the analysis in question, the quality principles of the Safe Water Drinking Act of 1996 (42 U.S.C. 300g-1(b)(3)(A) & (B)).

DOD Guidance, § 3.2.3.3, at 3. Under the Safe Drinking Water Act Amendments of 1996 referenced in the quotation immediately above, an agency is directed, “to the degree that an Agency action is based on science” to use

- (i) the best available, peer reviewed science and supporting studies conducted in accordance with sound and objective scientific practices; and
- (ii) data collected by accepted methods or best available methods (if the reliability of the method and the nature of the decision justifies use of the data).

42 U.S.C. § 300g-1(b)(3)(A).

Any affected person may submit a Request for Correction of Information with respect to information that does not comply with the OMB Guidelines or DOD Guidance quality standards. DOD Guidance, § 3.3 at 4-6. Here, the Alaska District’s Public Notice, Permit, and Decision Document contain information that does not meet the

utility, objectivity and integrity, and best available science standards with respect to critical aspects of the Alaska District's decision making.

Ordinarily, a Request for Correction of Information is to be processed within sixty working days and requestors are to be notified if it requires more than sixty working days to resolve. Department of the Army's U.S. Army Records Management and Declassification Agency's *Administrative Procedures for Processing Claims Submitted Under the Quality of Information Program* (May 18, 2004), at § 4.a. Since work has already begun on the POA expansion project, requestors ask that the Corps process their Request as expeditiously as possible.

III. REQUESTORS

The requestors are:

Cook Inletkeeper
Attn: Bob Shavelson, Executive Director
P.O. Box 3269
3734 Ben Walters Lane
Homer, Alaska 99603
Ph: (907) 235-4068 x22
Fax: (907) 235-4069

Cook Inletkeeper is a community-based nonprofit organization that combines advocacy, education, and science toward its mission to protect Alaska's Cook Inlet watershed and the life it sustains. Inletkeeper's monitoring and science work builds credibility with scientists and resource managers, its public education and advocacy efforts enhance stewardship and citizen participation, and together, these efforts translate into its ability to effectively ensure a vibrant and healthy Cook Inlet watershed. Inletkeeper has 800 members, 670 from Alaska. Inletkeeper submitted multiple comments on the proposed permitting for the POA expansion project to the Corps' Alaska District Office. For further information concerning Inletkeeper, its goals and programs, please see its website at www.inletkeeper.org.

Alaska Public Interest Research Group
Attn: Steve Cleary, Executive Director
PO Box 101093
Anchorage, Alaska 99510-1093
Phone: (907) 278-3661
Fax: (907) 278-9300

The Alaska Public Interest Research Group ("AkPIRG") is a non-profit, non-partisan, citizen-oriented statewide organization researching, educating and advocating on behalf of the public interest in Alaska. AkPIRG exists to promote the public and consumer interests, especially when inconsistent with moneyed, powerful, or other

special interests. AkPIRG has 1,600 Alaskan members. For further information concerning AkPIRG, please see its website at www.akpirg.org.

Alaska Center for the Environment
Attn: Randy Virgin, Executive Director
807 G Street, Suite 100
Anchorage, Alaska 99501
Phone: (907) 274-3621
Fax: (907) 274-8733

The Alaska Center for the Environment (“ACE”) is a non-profit environmental education and advocacy organization whose mission is to enhance Alaskans’ quality of life by protecting wild places, fostering sustainable communities, and promoting recreational opportunities. ACE advocates for sustainable policy on behalf of nearly 6,000 Alaskan members, many of whom use and enjoy the Cook Inlet. ACE uses routine newsletters, electronic mailings, meetings and other methods to keep its members informed of activities that may adversely affect the waters and wildlife in Cook Inlet and which activities may be authorized by federal and state agencies. For further information concerning ACE, please see its website at www.akcenter.org.

Counsel for Requestors:

Trustees for Alaska
Attn: Michael J. Frank, Senior Staff Attorney
1026 W. 4th Ave., Suite 200
Anchorage, Alaska 99501
Ph: (907) 276-4244 ext. 116
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IV. FACTUAL BACKGROUND FOR THE POA EXPANSION PROJECT

A. The POA

In 1999 the POA, an agency of the Municipality of Anchorage, adopted the *Regional Port of Anchorage Master Plan*. The 1999 *Master Plan* proposed the replacement and expansion of existing infrastructure at the POA to accommodate market driven needs through 2020. Exhibit A, excerpt of *Final Report of the Master Plan* for the *Regional Port of Anchorage* (September 1999), at ES-1 – ES-10. By 2001, the engineering firm Tryck, Nyman, and Hayes, Inc. began drawing up plans for a \$225 million replacement and expansion project based upon a POA-selected design alternative. This design consisted of a traditional pipe pile supported dock used at all major ports on the West Coast of the United States. Exhibit B, James MacPherson, *Huge port expansion proposed*, Alaska Journal of Commerce Online, Apr. 8, 2002.

In the early summer 2001, however, William J. Sheffield, Alaska Governor in 1982-86, was appointed director of the POA. Exhibit C, Tim Pryor, *Sheffield considered for port job*, Anchorage Daily News, April 30, 2001, at B-3; Sarana Schell, *Port orientation*, Anchorage Daily News, June 20, 2001, at E-1. Without competitive bidding beforehand, Sheffield commissioned a new study by Peratrovich, Nottingham & Drage, Inc. (“PND Engineers”) at a cost of \$30,000, and in March 2002 Sheffield revealed PND Engineers’ proposed plan for a much larger port expansion project, but with a different in-water dock design and with, allegedly, a lower price tag, \$146 million. Exhibit B, MacPherson, *Huge port expansion proposed; Port of Anchorage Expansion Study*. Mr. Sheffield was quoted saying that at \$146 million, the OCSP alternative was “millions cheaper” than the plans being worked on by Tryck, Nyman, and Hayes, Inc. Exhibit D, Associated Press, *Port of Anchorage’s Top Engineer to Quit – Richard Burg says he couldn’t support city’s new expansion plan*, Anchorage Daily News, June 18, 2002, at B3.

The new dock design favored by Mr. Sheffield is called open cell sheet pile (“OCSP”). PND Engineers claims to have patents on the OCSP system. Exhibit E, Letter from Dennis Nottingham, President, PND Engineers, Inc., to To Whom It May Concern, (Dec. 28, 2005) (“PND intends to enforce these three patents [related to the OCSP system] and other intellectual property in order to protect its proprietary rights.”). The OCSP design uses 3 foot wide by 90 foot long interlocking sheets of steel to create rounded and adjoining cells. These cells are then filled with gravel and covered with a concrete deck.

B. MARAD EA

Any major funding or permitting decision by a federal agency must be preceded by analysis of the environmental impacts under the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4332 *et seq.* Over 50% of the POA project funding is to come from the federal government. Exhibit B, MacPherson, *Huge port expansion proposed* (“Sheffield said he’s already been in contact with Alaska Republicans, Sen. Ted Stevens and Rep. Don Young, who have been supportive toward funding the newest port expansion project.”).⁴ Recently, the Municipality of Anchorage’s Mayor, Mark Begich, indicated that the projected development cost for the port expansion is “approximately \$500 million.” Exhibit F, Municipality of Anchorage, Assembly Information Memorandum, AIM No. 105-2007 (Meeting Date: Nov. 27, 2007).

Because the U.S. Department of Transportation, Maritime Administration (“MARAD”) was to be the overall project manager, it prepared NEPA environmental assessments (“EA”) for related aspects of the proposed expansion project. One MARAD

⁴ See also, U.S. Senate Committee on Environment & Public Works Hearing Statements, Statement of Cheryl Coppe, Executive Administrator for Development, Port of Anchorage (Apr. 14, 2003), available at http://epw.senate.gov/hearing_statements.cfm?id=213411 (“total cost estimated ... approximately \$227 million” of which shares are “38% Nonfederal; 27% Appropriations Earmarks and 35% from TEWA-21 Reauthorization”).

EA was for road and railroad improvements around the POA. MARAD found there would be no significant impacts from this aspect of the port project, which it claimed had independent utility from the dock-related aspects of the project. MARAD, *Final Port of Anchorage Road and Rail Extension Environmental Assessment* (January 2004). The road and railroad improvements analyzed in this EA have already been built.

Later, MARAD prepared an EA concerning the dock design aspects of the project. MARAD published a draft EA and called for public review and comment on it. It is the dock design aspects addressed in this EA that are at issue in this Request for Correction of Information. After rejecting a number of design alternatives from further analysis, MARAD carried forward for analysis in its EA "three methods of design, a sheet pile method, a pipe pile-supported dock, and a combination of the two design techniques." MARAD, *Final Port Intermodal Expansion Project - Marine Terminal Redevelopment Environmental Assessment* (March 2005) ("MARAD EA"), at 2-1.⁵ Alternative A, the OCSP design, would require the delivery and placement of 12, 283,000 cubic yards of fill for the new 135 acres, all of which is "mapped" Essential Fish Habitat ("EFH") and which includes 66 acres of intertidal area and 69 acres of sub-tidal area. *Id.* at 2-70, 2-62. In addition, it would require over 3 million cubic yards of in-water dredging for construction. *Id.* at 2-40, Table 2-3a. Cost of construction was estimated at between \$415 and 418 million. *Id.* Appendix G, at G-15 - G-16. The cost of constructing the pipe pile design was estimated at about \$497 million. *Id.* at G-17. The cost of the "combined" or hybrid design, combining the OCSP and pipe pile designs, was estimated at about \$434 million. *Id.* at 19. Construction was anticipated to take seven years. *Id.* at 2-38.

Cook Inletkeeper, the U.S. Fish & Wildlife Service ("USFWS"), U.S. Environmental Protection Agency ("EPA"), and National Oceanic and Atmospheric Administration, National Marine Fisheries Service ("NMFS") commented on it. Each requested that MARAD prepare an Environmental Impact Statement ("EIS"). *See generally* MARAD EA, Appendix H Issues and Responses. Among the reasons they gave were the potential for the project to cause significant impacts to fish, particularly salmon species that use nearby Ship Creek and other watersheds in Knik Arm, and to cause significant impacts on the Cook Inlet beluga whale, which is currently the subject of a listing rule, *see* 72 Fed. Reg. 19854 (Apr. 20, 2007), proposed by the NMFS under the federal Endangered Species Act. Also, commenters raised questions about the seismic stability of the OCSP design; they suggested that a pipe pile design would be more stable and suffer less damage during an earthquake. They also pointed out that a pipe pile design would destroy much less intertidal and sub-tidal habitat, and would have fewer and less severe environmental impacts on fish and marine mammals. MARAD EA, Appendix H - Issues and Responses.

In response to these comments, MARAD rejected the need for an EIS and instead issued a Finding of No Significant Impact ("FONSI") in March 2005. MARAD selected the OCSP design over the other two designs. MARAD FONSI, at 2, 3-4.

⁵ This MARAD EA and FONSI are available at http://www.portofanchorage.org/library_p.html (last visited March 8, 2008).

As described in the MARAD EA,

The project consists of two primary components:

- **Construction** of marine structures for berthing barges, cruise ships, container ships, RO-RO, cement, and POL vessels for the critical replacement of functionally obsolete existing facilities in conjunction with development of tidelands for creation of cargo transfer and storage areas, staging area for Stryker Brigade Combat Team and other USARAK deployments, industrial fabrication and staging areas and
- **Operation** of a modern, stable, and secure facility with improved equipment for loading, unloading, cargo transfer, and storage. In addition, dredging would be conducted by the U.S. Army Corps of Engineers (USACE) to provide construction site preparation and suitable water depths for ships that would call on the terminal. Dredging would apply to the berthing area and maneuver area for ships and extend to a maximum design depth of -45 feet MLLW, or ten feet deeper than current dredge depths.

Id. at 2-1 (bold and italics in original).

As described in the MARAD FONSI, once constructed the approved project would result in “doubling the size of the POA.” *Id.* at 1. The project's in-water aspects would include:

- Demolishing and replacing structures that are degraded, decayed, or functionally obsolete;
- Providing barge dock capacity;
- Expanding commercial dock space to meet unfilled present and future demands;
- Upgrading functionally obsolete cranes to enable a full reach across ship beams;
- Providing the additional land and facilities necessary to support military rapid deployment from Alaska's bases, including the U.S. Army's Stryker Brigade Combat Team and Airborne Brigade Combat Team (BCT) Sealift Operations;
- Improving landside traffic circulation and intermodal surface freight operations;
- Replacing and relocating code-compliant POA support structures and buildings and developing warehouse storage;
- Developing a secured cruise ship terminal to accommodate passengers and baggage screening in accordance with new Homeland Security mandates;
- Providing rail connection to the waterfront for commercial and military intermodal transfers; and

- Installing state-of-the-art security and lighting controls in accordance with the new Maritime Security mandates.

MARAD EA, at 1-1 (internal italicization eliminated). The construction of the project would result in the dredging and filling of intertidal and sub-tidal lands, and

would add approximately 135 acres of land and approximately 8,880 feet of waterfront structures in an area located west, northwest, and southwest of the existing POA facilities.

Id. In addition, dredging would be conducted by the Corps to provide “construction site preparation and suitable water depths for ships that would call on the terminal ... to a maximum design depth of -45 feet MLLW, or ten feet deeper than current dredge depths.” *Id.*

C. Corps Permits

For the POA to proceed with construction of both Phase I and II of the project, among other authorizations it needed dredge and fill permits under Section 404 of the Clean Water Act, 33 U.S.C. § 1344.

In April 2005, the Alaska District issued a Public Notice for a limited permit for Phase I of the project, involving the fill of 27 intertidal acres north of the current POA facilities. NMFS and USFWS submitted comments on this permit. Exhibit G, Letter from James W. Balsiger, NMFS Administrator, Alaska Region to Colonel Timothy J. Gallagher, Alaska District (June 1, 2005); Exhibit H, Letter from Ann G. Rappoport, Field Supervisor, USFWS to Colonel Timothy J. Gallagher, Alaska District (June 6, 2005). Neither USFWS nor NMFS opposed the permit for Phase I per se, but this was based on their expressed understanding that issuance of the Phase I permit would not constrain a thorough alternatives analysis for Phase II, about which both agencies had many questions and concerns. *See id.* The Alaska District later issued a permit for Phase I.

Subsequently, on January 19, 2006, the Alaska District issued a Public Notice for a permit application for Phase II to authorize the dredge and fill of the remaining 108 acres of intertidal and sub-tidal acres proposed for fill (135 - 27 = 108). In response, the aforementioned federal agencies submitted letter and email comments to the Alaska District Office, in some instances multiple times. They reiterated their concerns about “significant” impacts to fish and marine mammals, raised issues about the seismic stability of the OCSP design, and once again called for the preparation of an EIS. *See, e.g.,* Exhibit I, Letter from Robert D. Mecum, Acting Administrator Alaska Region, NMFS to Colonel Timothy J. Gallagher, Alaska District (Mar. 22, 2006), at 3 (project has a “significant probability” of causing a taking of beluga whales), and Enclosure B thereto, at 2 (cause “significant declines” in anadromous fish populations and potential for “serious ecological and economic consequences”); Exhibit J, Letter from Ann J. Rappoport, Alaska Field Supervisor, USFWS to Colonel Timothy J.

Gallagher, Alaska District (Mar. 17, 2006), at 3 (“significant direct impacts” to fish); and Exhibit K, Letter from Heather Dean, Environmental Scientist, EPA to Ryan H. Winn, Project Manager, Alaska District (Mar. 22, 2006), at 1 (chosen alternative not the least environmentally damaging practicable alternative, and many serious impacts to fish and other resources). Requestor Cook Inletkeeper also commented, requesting among other things that the Alaska District publish a draft EA and draft permit so that the public could review and comment on them. Exhibit L, Letter from Bob Shavelson, Executive Director, Cook Inletkeeper to Timothy J. Gallagher, Alaska District Colonel (Mar. 22, 2006), at 1-2, and Letter from Bob Shavelson, Executive Director, Cook Inletkeeper to Colonel Kevin J. Wilson, Alaska District (June 5, 2007), at 1.

Without issuing a draft permit or draft EA for public review, however, on August 10, 2007, the Alaska District issued Permit No. POA-2003-502-N (“Permit”) for Phase II of the project. The Permit was accompanied by the aforementioned Department of the Army Permit Evaluation and Decision Document. The Decision Document purports to serve both as the Alaska District’s EA under NEPA and as the required analyses under the Section 404(b)(1) Guidelines of the Clean Water Act. The Decision Document indicates that it evaluates information required by the Section 404(b)(1) Guidelines and NEPA “as well as other regulatory considerations and findings mandated by our program, that are not fully addressed in the EAs prepared by the MARAD.” *Id.* at 2. Embodied within the Decision Document is the Alaska District’s FONSI under NEPA in which the Alaska District claimed that the project would not have a significant impact on the environment and therefore an EIS was not required. Decision Document, § 8.6 at 105.

The Permit authorizes the discharge of fill in 20.5 acres of wetlands associated with the development of gravel pits on nearby Elmendorf Air Force (“EAFB”) base (the gravel to be used as fill at the POA), the dredging and discharge of 258,000 cubic yards of sediment over 21 acres for the construction of the expanded dock, and discharge of 9.5 million cubic yards of fill over 111 acres of intertidal and near shore sub-tidal waters of Knik Arm, also necessary for the construction of the expanded dock. Permit, at 1. The Decision Document indicates that the “proposed open cell sheet pile dock design would result in the permanent loss of approximately 135 acres of intertidal and shallow sub-tidal aquatic habitat between Ship Creek and Cairn Point.” *Id.* at 6. This “would eliminate approximately *eighty percent* of the remaining intertidal area that exists in the industrial area between Ship Creek and Cairn Point.” *Id.* at 90 (emphasis added).

After the Decision Document was issued, requestors Cook Inletkeeper and AkPIRG sought documents from the POA under the Alaska Public Records Act, and from the Alaska District, NMFS, and MARAD under the federal Freedom of Information Act in order to determine the basis, if any, for assertions made in the Decision Document. Based upon the documents they have received, the contents of the Decision Document and MARAD EA, and other information available to them, they submit this Request for Correction of Information.

What follows is a description of the information that does not comply with the OMB Guidelines and DOD Guidance.

V. SYSTEMIC LACK OF “UTILITY” AND “OBJECTIVITY” OF THE INFORMATION PRESENTED

The Decision Document contains a systemic error under NEPA that causes the document to fail the information quality “utility” and “objectivity” criteria under the DOD Guidance.

The Decision Document asserts that the

environmental assessments prepared by the U.S. Department of Transportation, Maritime Administration, the lead federal agency under the requirements of NEPA, are partially incorporated by reference into this decision document.

Id. at 2. The Decision Document does not, however, specify what portions, pages, or appendices of the MARAD EAs are partially incorporated by reference or otherwise relied upon. Nor is any particular section or subsection of a specifically-identified MARAD EA tied to any specific portion of the Decision Document’s analysis.

The Decision Document’s oblique reference to the MARAD EAs --- including the 300-plus page EA published in March 2005 --- plainly does not satisfy the Alaska District’s disclosure obligations under NEPA and means that the information disseminated in the Decision Document was in contravention of the OMB Guidelines and DOD Guidance.

The NEPA requires that the public be given the opportunity to analyze and comment on all the material used to prepare the NEPA document, whether it is an EIS or EA. To advance that goal, the President’s Council on Environmental Quality’s regulations require that analysis contained in a NEPA document prepared by another agency, or a study or the like, and otherwise eligible for incorporation by reference into the NEPA document at issue must be “cited in the statement and its content briefly described.” 40 C.F.R. § 1502.21. A “cursory reference” to the cited material, however, like the cursory and uninformative reference to the MARAD EAs contained in the Decision Document, is insufficient when “[n]o explanation or hint is given as to what one could find by reading” the cited material. *Association Concerned About Tomorrow v. Dole*, 610 F. Supp. 1101, 1109 (N.D. Texas 1985); *see also Sierra Club v. U.S. Dep’t of Trans.*, 962 F. Supp. 1037, 1045 (N.D. Ill. 1997).

Because the Decision Document purports to incorporate by reference the MARAD EAs but does so without any specificity, it does not satisfy the “utility” criteria under the DOD Guidance. *See* DOD Guidance, § 3.2.2, at 3 (“ ‘Utility’ refers to the usefulness of the information to intended users, including the public. When reviewing information for dissemination, Components must consider the usefulness of the information for its reasonable and expected application”); *id. Definitions*, § 12 (utility “Refers to the relevance and timeliness of information to its intended users, including the public... . [T]he Component needs to consider the uses of the information ... from the

perspective of the public”). The Decision Document does not lead the reader to the information in the MARAD EA upon which the Alaska District Office relied. It leaves the reader unable to determine what information the Alaska District believed was important in the MARAD EAs and which supported its FONSI. Thus, the Decision Document violates the utility criteria.

The Decision Document’s failure to identify the portions of the MARAD EAs that it relies upon also violates the objectivity criteria. That criteria requires that the

Component must identify the sources of the disseminated information ... and, in a scientific, financial or statistical context, the supporting data and models, so that the public can assess for itself whether there may be some reason to question the objectivity of the sources. Where appropriate, supporting data ... should have full, accurate, transparent documentation, and error sources affecting data quality should be identified and disclosed to users when possible.

DOD Guidance, *Definitions*, § 8.1, at 3; *see also id.* § 3.2.2 at 3 (the disseminated information must be “presented in ... [a] complete ... manner”); OMB Guidelines, § V.3, 67 Fed. Reg at 8460 (defining objectivity to include the requirement that the “agency needs to identify the sources of the disseminated information”). The Decision Document’s vague reference to the MARAD EAs, which purportedly contain information that somehow supports the Document’s analyses and conclusions, simply does not adequately identify the information upon which the Alaska District relied for its FONSI and decision to grant the Permit. This also makes the Decision Document incomplete, violating the objectivity criteria.

VI. INFORMATION ABOUT THE GEOTECHNICAL ATTRIBUTES OF THE OCSP DESIGN

The Decision Document indicates that the

Project is located in an area of high seismic activity. The critical role of the facility in commerce of the State of Alaska mandates that the Port survive a major seismic event with the ability to continue operations.

Id. at 3.⁶ Commenters on the proposed permit action raised concerns about the geotechnical aspects of the OCSP design. *See, e.g.*, Decision Document, at 13 (discussing John Daley’s comments). EPA, USFWS, and NMFS all expressed concerns, and USFWS and NMFS recommended an independent third party peer-review of this aspect of the project. *See id.* at 34 (discussing EPA’s comments), 20 - 22 (discussing USFWS’s comments), and 40 - 41 (discussing NMFS’s comments).

⁶ For information about recent earthquakes in Alaska and their unusual intensity, see the website of the Alaska Earthquake Information Center at the Geophysical Institute of the University of Alaska Fairbanks, at <http://www.aeic.alaska.edu/>. A discussion of "notable" earthquakes above M6 occurring the last decade is at http://www.aeic.alaska.edu/html_docs/notable_events.html.

The Decision Document, however, disseminates information concerning the geotechnical attributes of the OCSP alternative which does not meet the objectivity standard under the OMB Guidelines and DOD Guidance.

There is considerable controversy about the relative ability of an OCSP design versus a pipe pile supported design to withstand damage from a large seismic event. The American Society of Civil Engineers has pointed out that “seismic performance of steel sheet pile bulkheads during past earthquakes has generally been very poor,” in contrast to pipe pile supported designs which “have performed well.” Exhibit M, Ports Committee of the Technical Council on Lifeline Earthquake Engineering, ASCE, Technical Council on Lifeline Engineering Monograph No. 12, *Seismic Guidelines for Ports* (March 1998), at 6-62, 6-17.

In 2002 Lachel & Associates prepared a report for the POA’s consulting port engineers, R & M Consultants, Inc. R & M was hired by the POA when its “top engineer,” Richard Burg, quit because he “found [himself] on the wrong side of the sheet pile” design controversy. Exhibit D, Anchorage Daily News, *Port of Anchorage's top engineer to quit – Richard Burg says he couldn't support city's new expansion plan* (6/18/02), at B3. The Lachel & Associates report found that, based on then available soils data,

the estimated factors of safety for global stability of the proposed cell at the end of construction (0.7 to 1.05) are well below those acceptable in normal engineering practice (1.2 to 1.5) the estimated factor of safety ... is grossly inadequate... .

Exhibit N, Lachel & Associates, *Port of Anchorage Potential Expansion Project Open-Cell Sheet Pile Design Concept Independent Technical Review* (August 2002), at I-3. It made recommendations for further study, including more soil borings. *Id.* at X-9 - X-10.

A few months later, Moffat & Nichols Engineers also compared the two designs. It found a “low Factor-Of-Safety for the interlock stresses in the open-cell sheetpile concept as proposed,” but suggested that since the “two basic [design] concepts offer significant differences to expansion options,” perhaps the issues it identified could be “refined or mitigated through technical design.” Exhibit O, Moffat & Nichols Engineers, *Port of Anchorage Expansion Project Review of Alternative Structural Concepts* (October 31, 2002), at 3. It also noted, however, that pipe pile supported design is “widely used in areas where seismic design is a major consideration,” and that OCSP design was “less conventional.” *Id.* at 8, 21. About the same time, Lachel & Associates expressed skepticism to R & M Consultants, Inc. concerning PND Engineers’ claims about the OCSP design's geotechnical attributes. Exhibit P, Letter from David R. Chapman, Lachel & Associates, to Duane Anderson, Chief Structure Engineer, R & M Consultants, Inc. (Nov. 18, 2002).

In 2004, the Municipality of Anchorage’s Geotechnical Advisory Commission passed a formal Resolution calling for further geotechnical investigation of the design

alternatives for the POA, including an “Independent third party peer review of technical aspects of the work, such as the stability of the design options and impacts of variations in material properties found within the dock expansion area.” Exhibit Q, Municipality of Anchorage, *Geotechnical Advisory Commission Resolution No. 2004-01* (March 30, 2004). A year later the Commission indicated that the rationale for the design had not yet been explained adequately and that no peer review of the designs had been completed. Exhibit R, Letter from Mark R. Musial, Chair, Geotechnical Advisory Commission, to William J. Sheffield, Director, Port of Anchorage (Aug. 15, 2005).

The Mayor of the Municipality of Anchorage eventually appointed a so-called “Mayoral Blue Ribbon Panel ... of experts and governing officials to establish seismic design criteria,” a group almost exclusively made up of individuals directly associated with the Municipality of Anchorage (which owns the POA), including POA Director Sheffield, other municipal officials, and a consulting geotechnical engineer. Exhibit S, *Port of Anchorage Geotechnical Process Port of Anchorage Intermodal Expansion Project* (March, 2006) (excluding Attachments A - D), at 6. The Panel did not include a representative from any State or federal agency with geotechnical expertise.

In any event, the *Port of Anchorage Geotechnical Process Port of Anchorage Intermodal Expansion Project* is accompanied by an Attachment A, a document entitled *Summary of Geotechnical Analysis Port of Anchorage Intermodal Expansion Mayor's Blue Ribbon Commission* (June 29, 2004) (“POA Summary of Geotechnical Analysis”) (Exhibit T). This latter document is particularly revealing. It states that:

There have been some 71 OCSP systems installed in Alaska but none at the height of the present project. This project requires sheet pile length of approximately 95 feet with a free height of approximately 85 feet at the lowest proposed dredge elevations. The highest length to date has been at Port Mackenzie that is approximately 60 feet in unsupported height.

Id. at 3. It then acknowledges that “The PSD [pipe pile supported design] or marginal wharf is the method preferred by most port design engineers in areas of potential seismic activity.” *Id.* It then discusses what the Commission believes are the advantages and disadvantages of the pipe pile supported design. After an evaluation of geotechnical information collected to date, it finds that “Based upon the stability analysis, we have determined that [both] the OCSP and PSD options are feasible for the construction of the port.” *Id.* Moreover, it states that in Area 4 of the dock, “we believe that the PSD option would have the best chance of survival since the PSD systems reaction under seismic loads is better understood by the engineering community.” *Id.* This statement is important because it is, in effect, an endorsement of the pipe pile supported design for Area 4 of the port, and this design is the same as the 2005 MARAD EA's “combined” or hybrid design alternative.

The POA did not respond to the Geotechnical Advisory Commission's August 15, 2005 letter until November 2006 when it acknowledged to the Commission that the “tallest open-cell wall face in a serious seismic zone has been about 60 feet at Point

MacKenzie and Dutch Harbor.” Exhibit U, Letter from Kevin Bruce, Port of Anchorage Director of Facilities Development to Mark Musial, Chairman, Geotechnical Advisory Commission, Municipality of Anchorage (Nov. 2, 2006), at 5. In contrast, the POA design will require 90 foot long sheet piles for which there is little seismic experience. Exhibit O, Moffat & Nichols Engineers, *Port of Anchorage Expansion Project Review of Alternative Structural Concepts* (October 31, 2002), at 23 (“The use of an open-cell sheetpile bulkhead in a deep water critical port environment, as in the OCSPW concept and at the proposed face heights (80-90+/-), has very limited actual seismic experience from which to draw conclusions”).

At some point Terracon Consulting Engineers, Inc. was enlisted by MARAD to “lead the geotechnical feasibility program,” and it prepared a report. Exhibit S, *Port of Anchorage Geotechnical Process Port of Anchorage Intermodal Expansion Project*, at 3; Exhibit V, Terracon, *Intermodal Expansion Port of Anchorage Open Cell and Pile Supported Deck Wharf Structures FLAC Analysis for 1964 Mega Earthquake*, Project 70045006.002 (Apr. 5, 2005) (“Terracon FLAC Analysis”). According to the POA, an Advisory Committee made up of academics in the seismic field was hired by Integrated Concepts Research Corporation (also a contractor to MARAD) to review Terracon's work. Exhibit S, *Port of Anchorage Geotechnical Process Port of Anchorage Intermodal Expansion Project*, at 3.

In the end, faced with competing claims about the geotechnical attributes of the OCSP design alternative, the Alaska District asked the Corps’ Engineer Research and Development Center (“ERDC”) to become involved. The ERDC later claimed it “conducted a review of 35% design documentation provided by CEPOA that details plans and analyses in support of a large expansion of existing port facilities at Anchorage.” Exhibit W, ERDC, *Port of Anchorage Expansion Project 35 % Design Review Prepared for the U.S. Army Engineer District, Alaska* (Revised 22 December 2006), at 1. In fact, what ERDC received was not “35% design documentation ... that details plans and analyses” for the project. When asked about ERDC’s review, the Alaska District’s Project Manager for the POA project explained that “35% level engineering design specifications (by Corps standards) for the whole project was not provided to ERDC.” Exhibit X, Email from Mike Frank, Trustees for Alaska, to Ryan H. Winn, Alaska District POA (Dec. 3, 2007; 10:43 a.m.) and Email from Ryan H. Winn, POA to Mike Frank, Trustees for Alaska (Dec. 4, 2007, 6:37 p.m.).

A MARAD official later confirmed that the ERDC report “erroneously cited what we gave them to review. We provided CEPOA with the 35% preliminary design drawings for the 2007 ITB solicitation package,” i.e., for construction work to the north of the POA involving only 350 lineal feet of OCSP in shallow depths. Exhibit Y, Email from Daniel E. Yuska, Jr., Environmental Protection Specialist, MARAD, to Brian K. Lance, NMFS, cc Alaska District’s Ryan Winn, Project Manager, US Army Corp of Engineers (Feb. 1, 2007; 15:40:16 -0500). In short, the drawings ERDC was given to review were not “35% design.” They were *preliminary*. They were for a fraction the length of the entire project, which will run over 7,000 feet in length. And they were for an atypical dock section that will be in shallow water depths.

In any event, ERDC did not sanction the OCSP design but did raise numerous questions about the analysis of the stability of the OCSP design. ERDC recognized that the “proposed structure ... represents an unprecedented application of the OCSP technique in terms of its areal extent and the height of its seaward face,” and that the “OCSP facility proposed is aggressive and unprecedented.” Exhibit W, *Port of Anchorage Expansion Project 35 % Design Review*, at 1, 7. It noted that the Terracon report used a “minimum end-of-construction safety factor of 1.2 ... [which is] unconservative” and did not mention the “minimum factor of safety should be for internal stability... . This minimum value should be determined with due consideration to the lack of redundancy afforded by the OCSP.” *Id.* at 3, 6. It stated that “several factors in the analyses need further evaluation,” later listing and discussing them. *Id.* ERDC’s report to the Alaska District also contained a “Summary of Required Design Actions” that included twelve items. *Id.* Without going into detail here, the subjects touched on in this list of twelve items (tail wall anchoring, internal stability of the back fill, toe heave, and joint strength) in effect raised numerous questions about the OCSP design.

In the end, the ERDC noted the “severe risks posed by potential failure scenarios,” and “strongly recommended” an “independent review and design panel, truly apart from the design team.” *Id.* at 7. As noted above, by this time the USFWS and NMFS had also recommended an independent, third party review.⁷

In the end, however, the Alaska District rejected these recommendations for an independent third-party review. Standing alone, this violated the DOD Guidance because it meant that the Alaska District did not use the “best available, peer reviewed science and supporting studies conducted in accordance with sound and objective scientific practices.” *Id.*, § 3.2.3.3, at 3 (incorporating 42 U.S.C. § 300g-1(b)(3)(A)).

Instead, the Alaska District decided to grant the Permit, allowing the POA to construct the OCSP design alternative. Even while doing so, however, the Alaska District acknowledged that there remained disagreement about the relative seismic stability of the OCSP design alternative, stating:

According to the applicant, OCSP structures have greater internal stability than pile supported structures during seismic events, decreasing the risk of damage and/or failure from a major seismic event. *There seems to be considerable disagreement in the engineering community regarding the above generalization.*

⁷ An independent, third party review is recommended by the American Society of Civil Engineers. See ASCE, *Minimum Design Loads for Buildings and other Structures*, ASCE Standard, ASCE/SEI 7-05 (including Suppl. No. 1), § 16.2.5, at 176 (“A design review of the seismic force resisting system and the structural analysis shall be performed by an independent team of registered design professionals in the appropriate disciplines and others experienced in seismic analysis methods and the theory and application of nonlinear seismic analysis and structural behavior under extreme cyclic loads.”)

Decision Document, at 13 (emphasis added). But despite this admission, the Alaska District inexplicably claimed that because of ERDC’s review, all would be well nonetheless:

[D]ue to the relation of the potential effect of the proposed design on other federal projects and the human and natural environment, the Corps contracted a design review by the ERDC. The ERDC has prepared an initial review of the global and internal stability of the proposed Open Cell Sheet Pile design under both seismic and static conditions. Their initial design review did not indicate that the proposed structure had a likelihood of failure and was generally accepting of the geotechnical investigations, studies, and engineering development to date. *However, the review pointed out several items requiring additional analysis and documentation necessary in the finalization of the design to accomplish acceptable safety standards. These design requirements would be requirements of the DA permit.*

Id. at 34 (emphasis added). These statements were misleading at best. They do not meet the objectivity standard. They do not present what ERDC reviewed or recommended in an accurate or a complete way. Nor is the substance of the information the Alaska District presented in these statements accurate or reliable.

It was incorrect for the Alaska District to assert that ERDC prepared “an initial review” of the stability of the OCSP design as if ERDC had full design documents before it. ERDC only had available to it a *preliminary* design of a small and unrepresentative section of the entire project.

Moreover, it was inaccurate for the Alaska District to assert that ERDC recommended “several” items requiring additional analysis when the ERDC’s Summary of Required Design Actions included not several, but twelve complicated recommendations. These recommendations concerned serious, unresolved aspects of the geotechnical attributes of the OCSP design alternative which go to the very core of the seismic stability question, a question that had been repeatedly raised during the Alaska District’s consideration of the permit application. This fact is completely omitted in the Decision Document, misleading the reader into assuming that except for a few minor matters, all was well and settled with respect to the assessment of the geotechnical attributes of the OCSP design.

Making matters worse, the Alaska District did not inform the public in the Decision Document that the Municipality’s Blue Ribbon Panel had concluded that for Area 4 of the proposed project, the Panel believed that the “PSD option would have the best chance of survival since the PSD systems reaction under seismic loads is better understood by the engineering community.” Exhibit T, *POA Summary of Geotechnical Analysis*, at 3.

Because of the foregoing, the Decision Document does not present an accurate, clear, complete, and unbiased analysis of all the information available and relevant to the

Alaska District's decision. The substance of the information presented is inaccurate, unreliable, and apparently biased. The Alaska District plainly did not use the best available, peer reviewed science and supporting studies in accordance with sound and objective scientific (including engineering) practices. All of this violates the objectivity, including best available science, standards of the OMB Guidelines and DOD Guidance.

VII. INFORMATION ABOUT "COSTS" OF THE DESIGN ALTERNATIVES

A. Legal Background - Least Environmentally Damaging Practicable Alternative Under the Clean Water Act Section 404(b)(1) Guidelines

The Corps' regulations implementing Section 404 of the Clean Water Act incorporate EPA's Section 404(b)(1) Guidelines contained in 40 C.F.R. Part 230. *See* 33 C.F.R. § 320.4(b)(4); 33 C.F.R. § 325.2(a)(6). The Corps may not approve a dredge and fill permit for a project unless the activity complies with the Guidelines. In particular, 40 CFR § 230.10(a) requires that the Corps select the least environmentally damaging practicable alternative ("LEDPA") for a project. An alternative is "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." *Id.* § 230.10(a)(2) (emphasis added). The "mere fact that an alternative may cost somewhat more does not necessarily mean it is not practicable... ." Preamble to the Section 404 (b)(1) Guidelines ("Preamble"), 45 Fed. Reg. 85336, at 85339 (Dec. 24, 1980). Correspondingly, a permit applicant's desire to minimize costs "must not be allowed to control or unduly influence the Corps' definition of ... 'practicable alternative'." U.S. Army Corps of Engineers, *Permit Elevation, Plantation Landing Resort, Inc.*, at 8 (April 21, 1989).

When determining the LEDPA, the Corps's analysis of "cost" may not include the evaluation of an applicant's "financial standing." 45 Fed. Reg. at 85339 ("We have changed the word 'economic' to cost. Our intent is to consider those alternatives which are reasonable in terms of the overall scope/cost of the project. The term economic might be construed to include consideration of the applicant's financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objectives of the Guidelines."). While the Preamble later notes that "If an alleged alternative is unreasonably expensive to the applicant, the alternative is not 'practicable'," the Corps has interpreted "unreasonably expensive" as an objective test and not one that focuses on the applicant's desires or financial standing. *See Sierra Club v. Flowers*, 423 F.Supp. 2d 1273, 1354 (S.D. Fla. 2006) ("Internal guidance to the Corps notes that '[t]he determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project.' Memorandum to the Field, 'Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements,' available at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/flexible.htm>").

B. Alaska District's Analysis of LEDPA

In its comments to the Alaska District, NMFS identified Alternative B (the MARAD EA's "combined" or hybrid OCSP and pipe pile design) as the LEDPA. Exhibit Z, Letter from Robert Mecum, Acting Administrator, Alaska Region of National Marine Fisheries Service to Colonel Kevin J. Wilson, US Army Corp of Engineers (Mar. 5, 2007). NMFS's contended that the tidal mudflats provide important habitat for salmon because the shallow water of the mudflats allows them to escape predation from belugas, *id.*, and the pipe pile supported section that would be built under the hybrid design would leave a portion of the mudflats intact, thus preserving a section of important salmon habitat. Exhibit AA, Letter from James W. Balsiger, Administrator, Alaska Region of National Marine Fisheries Service to Michael Carter, MARAD (Apr. 7, 2005). In contrast, Alternative A's construction --- the OCSP design --- would destroy this habitat completely by the installation of sheet piling all the way to the marine terminal's edge eliminating the tidal mudflat area. *Id.*

The EPA echoed NMFS's opinion that a design that preserves part of the shallow near shore habitat is needed for migrating salmon. Exhibit K, Letter from Heather Dean, Environmental Scientist, EPA to Alaska District's Ryan Winn, Project Manager, US Army Corp of Engineers (Mar. 22, 2006).

The USFWS also agreed with NMFS. It stated that the POA's Preferred Alternative, the OCSP design, is not the least environmentally damaging. Exhibit J, Letter from Ann G. Rappoport, Field Supervisor, Department of Fish and Wildlife to Colonel Timothy G. Gallagher, District Engineer, Alaska District (May 17, 2006), at 5. The USFWS recommended that the Alaska District decline to issue a Section 404 permit unless a less damaging alternative was proposed. *Id.*

During the permit review process, the Alaska District suggested to POA that the other proposed alternatives that limit the amount of area to be filled would be less environmentally damaging. Exhibit BB, Letter from Ryan H. Winn, Project Manager, U.S. Army Engineer District, Alaska to Kevin Bruce, Deputy Director, Port of Anchorage (undated). The Alaska District ultimately found that a partial pipe pile supported dock (the hybrid design) would be "technologically practicable." Decision Document, at 13, and *id.* at 41 ("feasibility studies conducted by the POA and MARAD determined that a partially pile-supported structure is feasible at this location"). It also found it logistically possible, *id.* at 13, and the least environmentally damaging alternative. *Id.* ("would result in less permanent environmental impacts"); *see also id.* at 38 ("[t]he Corps agrees with the USFWS that pile-supported designs minimize the permanent loss of aquatic habitat and should be fully evaluated").

The Alaska District ultimately concluded, however, that hybrid design was too expensive, and therefore disqualified it on the ground of the "costs" factor in 40 C.F.R. 230.10(a)(2). Decision Document, at 94 ("The use of a partially pile supported dock design is considered by the Corps to represent a less damaging environmental alternative; however, it was determined to be impracticable primarily due to considerations of cost."). Instead, the Alaska District selected the OCSP design alternative as the LEDPA, and the Permit allows it to be constructed by the applicant.

C. Information Deficiencies Concerning LEDPA

The “costs” information the Alaska District used in making its Permit decision and presented in the Decision Document fails to meet the objectivity standard for numerous reasons.

1) Improper use of “funding” in determining LEDPA

One of the costs reasons that the Alaska District used for finding that the hybrid design was not the LEDPA is that there allegedly was limited funding available for the project. The POA claimed that the current funding for the project --- from local, State and federal sources --- was limited, and that receipt of additional funding from the State in the future would likely be limited as well. Decision Document, at 12. The Alaska District pointed to this alleged lack of additional available funds as a reason that it chose the supposedly less expensive OCSP design alternative.

The permit applicant’s available funding for a project is, however, just a different way to describe the “applicant's financial standing” which, as explained above, is not a valid consideration when determining the LEDPA. *See* 45 Fed. Reg. at 85339. The Alaska District consequently should not have used funding as a reason for selecting the OCSP design alternative as the LEDPA. The Decision Document’s discussion of funding presented biased and unreliable information in that regard, in violation of the DOD Guidance.

Even if it were permissible to consider currently available funding or future funding increases in determining the LEDPA, the Alaska District accepted POA's representations as to the lack of funding without first independently investigating and verifying them to make sure they were reliable and unbiased.⁸ A quick search of the State of Alaska’s website by the Alaska District would have shown that Alaska has significant financial reserves in the Permanent Fund (\$38.9 billion as of Sept. 30, 2007, \$37 billion as of February 2008) and Constitutional Budget Reserve (\$2.4 billion as of July 2007, and \$3.17 billion as of February 2008) that might be used as a source of funds for the project, were the State government willing.⁹ Persistently high oil prices will continue to fatten the Alaska treasury. In 2007 the Legislature appropriated \$10 million for the project, but Governor Sarah Palin vetoed it. Exhibit CC, Tim Bradner,

⁸ *See Anderson v. Evans*, 314 F.3d 1006, 1017 (9th Cir. 2002) (citation omitted) (agency “may rely on experts hired by other parties so long as...[it] objectively evaluates the ... analysis of the expert”); *Friends of the Earth v. Hintz*, 800 F.2d 822, 835 (9th Cir.1986) (recognizing the Corps must rely on information provided by the applicant but “nonetheless had an obligation to independently verify the information supplied to it,” *citing* 33 C.F.R. Part 230, App. B § 8(b) and 40 C.F.R. § 1506.5); *see also* 40 C.F.R. § 1506.5(a) - (b) (requiring an agency to “independently evaluate the information submitted and shall be responsible for its accuracy” and “make its own evaluation of the environmental issues and take responsibility for the scope and content of the environmental assessment”).

⁹ *See* Constitutional Budget Reserve at http://www.revenue.state.ak.us/treasury/Cash_Mgmt/index.asp (last visited Feb. 27, 2008) and Permanent Fund at <http://www.apfc.org/> (last visited Feb. 27, 2008).

*Lawmakers cringe over governor's deep budget cuts - Vetoes trim \$231 million from State's capital budget, Alaska Journal of Commerce (July 8, 2007).*¹⁰

Nonetheless, despite the well known existence of these large State-controlled funds and the Legislature's prior appropriation, the Decision Document does not explain why additional State funds, or why additional local funds, could not become available for the project in the future.¹¹ *Cf. Friends of the Earth v. Hall*, 693 F. Supp. 904, 946 (W.D. Wash. 1988) (criticizing the failure to "explain why additional funds would not be available"). Thus, the Alaska District used and disseminated incomplete, biased, and unreliable information concerning the project, in violation of the OMB Guidelines and DOD Guidance.

Again, however, the main point here is that the alleged federal, State and local governments' unwillingness to fund the project is not a basis for determining LEDPA. By including the discussion of funding in the Decision Document's discussion of the LEDPA, the Alaska District presented inaccurate and biased information, in violation of the DOD Guidance.

2) Deficiencies concerning costs information

In addition to the alleged lack of funding, the Alaska District claimed that construction cost information was also determinative in its choice of the OCSP design alternative. The Alaska District's presentation of the information concerning construction costs is, however, inaccurate, unclear, incomplete, and biased in favor of the OCSP design, in violation of the OMB Guidelines and DOD Guidance. As a matter of substance, the information also is inaccurate, unreliable, and unbiased, and otherwise fails to meet the best science standard of the OMB Guidelines and DOD Guidance.

NMFS asked the Alaska District to require the POA to prepare 35% of the design work for both alternatives and then compare costs, rather than rely on POA's mere "conceptual" designs and costs estimates. Exhibit Z, Letter from Robert Mecum, Acting Administrator, Alaska Region of National Marine Fisheries Service to Colonel Kevin J. Wilson, US Army Corp of Engineers, Alaska District (Mar. 5, 2007), at 2. The Alaska District rejected this proposal, stating:

¹⁰ There is, however, a \$10 million appropriation to the Municipality of Anchorage for the POA expansion project in a Senate Bill now moving through the Alaska Legislature. *See* CS FOR SENATE BILL NO. 256(FIN) am(efd fld), section on Grants to Municipalities, available at http://www.legis.state.ak.us/basis/get_bill_text.asp?hsid=SB0256C&session=25 (last visited Mar. 5, 2008).

¹¹ The Decision Document remarks that future State (as opposed to local) funds are "questionable" given what was Alaska Governor Sarah Palin's proposed budget at the time. *Id.* at 12. But the POA expansion project is a seven year construction project, and the State's annual budget could easily change from year to year. MARAD EA at 2-38. Moreover, the POA, MARAD and the Corps all claim that the project is critical for national defense and for Anchorage's and the State's economic future. Decision Document, at 3-4. If the local, State, and federal taxing authorities are unwilling now or in the future to provide adequate funds for such an allegedly critical project, it reflects that there is no genuine purpose and need for size of the project or its new features (such as the dedicated cruise ship dock), notwithstanding the Alaska District's finding to the contrary. *Id.* at 3 – 5.

A Corps Cost Engineer provided an independent review of the cost-related information provided by the applicant and determined that the relative cost estimates provided for the various design alternatives were reasonable. The Corps has further determined that a hybrid design would have substantially higher construction costs relative to the proposed OCSP design as well as a greater potential for design problems. The Corps has determined that the cost estimates provided by the applicant, which were based on feasibility level designs, are within 15% of actual costs. Based on this information, the Corps has determined that additional design detail (e.g., requiring a 35% engineering design of the various alternatives) is not required to adequately generate cost estimates for our regulatory analysis of the practicability of alternatives.

Decision Document, at 11. The Alaska District's conclusion that the non-OCSP designs would have "substantially higher construction costs" was based on information supplied by POA. *See id.* (making repeated references to "according to the applicant" with respect to information concerning costs).

The "costs estimates provided by the applicant" and upon which the Alaska District relied were supplied after the Alaska District made a request for information about costs to the POA. In response to this request, the POA supplied the Alaska District with a Cost Comparison prepared by PND Engineers. Exhibit DD, Email from Diane Carlson, Project Manager, Anchorage Port Expansion Team, to Ryan H. Winn, U.S. Army Corps of Engineers Alaska District (Jan. 31, 2007, 1:11 PM) (excerpt), and Exhibit EE, PND Engineers, Inc., *Cost Comparison – Page 1 – Prepared by: CDC* ("PND Cost Comparison") (attached to the Email). In the email text, the POA asserts that

This is not a detailed costs estimate; we do not have the technical engineering design documents to conduct a detailed cost estimate. Further, the materials take-offs are based upon concepts described within the MTR NEPA documentation.

Exhibit DD, Email from Diane Carlson, Project Manager, Anchorage Port Expansion Team, to Ryan H. Winn, U.S. Army Corps of Engineers Alaska District (Jan. 31, 2007, 1:11 PM). In answering a question from the Alaska District why the pipe pile design was "more cost prohibitive" than the OCSP design, the POA responded that "PSD [Pile Supported Docks] requires more steel and concrete than OCSP for the same amount of area; the difference in total cost is directly proportional to the cost of these two items." Exhibit FF, Email from Diane Carlson, Project Manager, Anchorage Port Expansion Team to Ryan H. Winn, U.S. Army Corps of Engineers Alaska District (Jan. 31, 2007, 4:22 PM).¹²

If there ever were a situation when it was important for a permitting authority to apply heightened scrutiny to the reliability of information a permit applicant submitted,

¹² Ms. Carlson apparently was employed by Integrated Concepts & Research Corporation ("ICRC"), a contractor to MARAD.

the POA's submission of costs estimates prepared by PND Engineers presented that set of facts. PND Engineers claims three patents on the OCSP design and states that it will enforce them. Exhibit E. It therefore has a direct financial stake in the outcome of the evaluation of the information in the PND Costs Comparison document that was provided to the Alaska District. This should have led the Alaska District to be particularly wary of relying upon the cost estimates PND Engineers provided.

Nonetheless, apparently the Alaska District did not ask for any references to the sources of the materials and costs information the PND Cost Comparison document uses, or if it did, it did not provide this information in the Decision Document or otherwise mention it, leaving the costs information incomplete.

The Alaska District, furthermore, was forewarned that the information provided was not a "detailed cost estimate," was not based on "design documents" because they did not exist, and that the "materials takeoffs ... [were] based on concepts" only, not designs. Exhibit DD, Email from Diane Carlson, Project Manager, Anchorage Port Expansion Team, to Ryan H. Winn, U.S. Army Corps of Engineers Alaska District (Jan. 31, 2007, 1:11 PM). It is amazing that for a project of this size, with hundreds of millions of earmarked federal tax dollars to be invested, the Alaska District was so willing to rely upon such a meager amount of information as the basis for its decision to grant the Permit.

Scrutiny of the PND Cost Comparison raises numerous questions about the reliability of the cost estimates in it. The PND Cost Comparison purports to show that a pipe pile supported design is three times more expensive per square foot than OCSP design (\$360.75 versus \$115.25 per square foot of deck). In fact, however, the 2005 MARAD EA contains costs information that directly conflicts with the PND Cost Comparison estimate. The Alaska District apparently ignored this contradictory cost information. It is not mentioned at all in the Decision Document.

The MARAD EA estimates that the OCSP design construction costs would be between \$415 and 418 million. *Id.* Appendix G. at G-15 - G-16. It gives a full pipe pile design cost estimate of \$497 million. *Id.* at G-17. It gives a hybrid design (which it calls the "combined" design) cost estimate of \$434 million. *Id.* at G-19. Thus, MARAD's hybrid design cost is just \$16 million more than the OCSP ($\$434 - 418 = \16), or a difference of about 3.8%, not even close to "three to four times" more than the cost of the OCSP design. The Decision Document does not explain the large difference between the MARAD EA estimates and the PND estimates that the Alaska District used. For this reason, therefore, the Decision Document once again presents information on costs that is incomplete and consequently biased in favor of the decision the Alaska District made in selecting the OCSP design.

The hybrid design would use OCSP except for Area 4, which runs about 1375 feet in length and is situated in the middle of the 8,800 foot dock face. MARAD EA at 2-77. Assuming the accuracy of PND's Cost Comparison showing a per square foot cost differential between OCSP and pipe pile supported design of $\$360.75 - \$115.25 =$

\$245.50 (based on 20 lineal feet of dock face), then the hybrid design alternative would cost \$67,512,500.00 more than the OCSP design.¹³ This is only 14 % more expensive than the cost of the OCSP design, a cost that, as noted above, the MARAD EA predicted would be between \$415 and 418 million. *Id.* Appendix G. at G-15 - G-16; ($\$67 + \$418 = \$485$; $\$67/485 = 13.8\%$).

Nonetheless, the Decision Document makes no mention of the costs estimates in the MARAD EA. Instead, the Alaska District relied upon a favorable review of the PND Cost Comparison by a Cost Engineer employed by the Alaska District who agreed with the PND estimate. Decision Document, at 11 (quoted above). The Cost Engineer asserted that "The actual numbers [that PND supplied] could be off by 15% but the relative costs are reasonable." Exhibit GG, Email from Alaska District's Dennis J. Blackwell to Alaska District's Andrea B. Elconin and Alaska District's Ryan H Winn (May 15, 2007 10:36 AM). He concluded that "the pile supported dock will cost several times the amount of a [*sic*] open cell design." *Id.* It is not clear from the Cost Engineer's two-paragraph email what effort, if any, he made to verify the numbers used in the PND Cost Comparison. Verification was obviously necessary in order to assure that the information about costs used by the Alaska District in making its Permit decision and as presented in the Decision Document met the OMB Guidelines and DOD Guidance.¹⁴ It should be noted, however, that his exchange of emails with the two other Alaska District personnel occurred over night. From the timing of the emails, it would appear that the Cost Engineer reached his conclusions after at best what could only a few hours to review the PND Cost Comparison estimates.

Moreover, the Alaska District's Cost Engineer explained that his conclusions about the accuracy of the estimate were partially based on his belief that the "This is especially true since the [fill] material will be obtained from Fort Richardson at minimal cost to the Port." Exhibit GG, Email from Alaska District's Dennis J. Blackwell to Alaska District's Andrea B. Elconin and Alaska District's Ryan H Winn (May 15, 2007 10:36 AM). This statement is incorrect. The cost of the fill would be the same for any design that is chosen. The MARAD EA suggests the fill material could come from a variety of public and privately owned sources, including Ft. Richardson and Elmendorf Air Force Base; the Alaska District stated that most fill material will come from Elmendorf Air Force Base and will be "inexpensive." Decision Document, at 1, 10. There is no evidence to indicate that the fill material would be more expensive if a design different than the OCSP design was used, or that the fill material would come from a different source depending on the choice of design.

¹³ Calculated as follows:

$$\begin{aligned} 1375 \text{ feet divided by } 20 \text{ feet} &= 68.75 \\ 68.75 \times (20 \text{ feet} \times 200 \text{ feet}) &= 27,500 \text{ square feet in Area 4} \\ 275,000 \text{ sq. ft.} \times \$245.50 \text{ additional cost/sq. ft. for pile versus OCSP} &= \$67,125,250.00 \end{aligned}$$

¹⁴ See OMB Guidelines, 67 Fed. Reg. at 8459 ("In addition, 'objectivity' involves a focus on ensuring accurate, reliable and unbiased information. In a scientific, financial, or statistical context, the original and supporting data shall be generated, and the analytic results shall be developed, using sound statistical and research methods."); DOD Guidance, *Definitions*, § 8.2 at 3 (same).

In any event, the Cost Engineer's assumption about fill was incorrect for another reason. According to the MARAD EA, the OCSP design would use between 5% and 30% *more* fill than either of the two other designs. *Id.* at 2-68, 2-70 (Table 2-9), 2-73, and 2-78; *see also* Exhibit HH, Letter from Kevin Bruce, Director of Facility Development, Port of Anchorage, to Ryan H. Winn, Project Manager, Department of the Army, U.S. Army Engineer District, Alaska (Sept. 25, 2006) (excerpts), at 10 (POA admitting that "OCSP ... would require a greater volume of fill" than other designs). Thus, the Cost Engineer was incorrect in suggesting that the source and cost of fill material would provide a cost advantage for the OCSP design over the pipe pile supported or hybrid design. If anything, since the OCSP design uses more fill than the other designs, this particular cost advantage is in favor of the pipe pile supported and hybrid designs.

Moreover, it appears that the PND Cost Comparison estimates for significant components are inconsistent with other estimates generated for the project which were neither mentioned nor examined in the Decision Document. These inconsistencies completely undercut the Alaska District's conclusion that the OCSP design is significantly cheaper than either the full pipe pile or hybrid design.

a) Sheet pile costs

The cost estimates in the PND Cost Comparison between pipe pile and sheet pile are based on a hypothecated 20 foot x 200 foot section of dock. The Comparison asserts that the sheet pile cost would be \$0.50 per pound (plus installation costs). This estimate is a nickel per pound *less* than the \$0.55 per pound (\$1,100 per ton estimate) that TEC Infrastructure Consultants LLC estimated for the Anchorage Port Expansion Team in 2004. Exhibit II, Anchorage Port Expansion Team, Techicon Infrastructure Consultants, *Port of Anchorage Marine Terminal Redevelopment*, Project No.: 6508.014 (July 2, 2004). Indeed, the PND Cost Comparison's lower cost estimate of \$0.50/lb. simply doesn't jibe with the POA's contemporaneous claim that the "cost of both steel and concrete, the primary materials used in a pipe pile supported structure, have increased dramatically in recent years." Exhibit HH, Letter from Kevin Bruce, Director of Facility Development, Port of Anchorage, to Ryan H. Winn, Project Manager, Department of the Army, U.S. Army Engineer District, Alaska (Sept. 25, 2006) (excerpts), September 12, 2006 Letter attachment, at 9. In fact, a 2007 comparison supplied to the POA by Tech Icon (and referenced in Mr. Bruce's September 25, 2006 letter to Ryan Winn) asserts that sheet pile costs \$1,500 per ton, or \$0.75 per pound, not the \$ 0.50 per pound estimate given in the PND Cost Comparison estimate. Exhibit JJ, *Poart [sic] of Anchorage Expansion Comparison of Sheet Pile vs. Pile Supported Construction Based on an Estimate by Tech Icon completed in 2004 and updated with unit pricing.*¹⁵

¹⁵ On this point it is worth reviewing the contents of three bids received in late August 2007 (about two weeks after the Alaska District issued the Permit) for work on aspects of the project. These bids are wildly out of synch with costs used in the PND Cost Comparison. The bidders quoted unit prices for "sheet pile supplied" of \$2,000.00, \$2523.00, and \$2,500.00 per ton, or \$2.00/lb., \$2.52/lb., and \$2.50/lb., respectively. Exhibit KK, Abstract of Bids/Offeres 2007 Marine Terminal Redevelopment Solicitation No.: 4406-2-S72.

There is another inconsistency between the numbers that the PND Cost Comparison used and those used elsewhere. For South Extension dock work, design documents show tail walls 175 feet long and include the note on a Drawing's tail wall section: "43 PS 31 sheets." Sheet 5 attached to the Permit shows a "TAIL WALL LENGTH SECTION BY DESIGN 125'-0" TYPICAL." Exhibit LL, ICRC Anchorage Port Expansion Team, PND Engineers, Inc., *Port of Anchorage Expansion Project September 2006 – Anchorage, Alaska - South Extension Drawings - 35% Drawings* (September 6, 2006) (excerpts), at South Extension Typical Section D-D. It is not clear which tail wall length is right, 125 feet or 175 feet, or whether the tail wall sections might vary in length in different areas of the project. In any event, a 175 feet tail wall at 43 sheets per wall means 86 sheets for the cell. That is considerably more than the 56 tail wall sheets the 2007 PND Cost Comparison estimate lists for each 20 feet x 200 feet section. More sheets of OCSP means more steel and a higher cost for the OCSP design alternative, a higher cost that is not reflected in the PND Cost Comparison that the Alaska District relied upon in the Decision Document.

b) Pipe pile costs

The PND Cost Comparison reflects the costs for pipe piles that would be 200 feet long. But it is not clear that 200 feet long piles would be necessary, or at least necessary everywhere. The MARAD EA gives no information about the length of the piles that would be needed. An analysis of the seismic attributes of the design alternatives completed for the POA pictured the use of 138 feet long piles, not the 200 feet long piles used in the PND Cost Comparison. Exhibit V, Terracon, *Intermodal Expansion Port of Anchorage Open Cell and Pile Supported Deck Wharf Structures FLAC Analysis for 1964 Mega Earthquake*, Project 70045006.002 (Apr. 5, 2005) ("FLAC Analysis"), at 2, Figure 1B. If piles shorter than 200 feet long are used, the cost per pile will be less. In the Decision Document, however, there is no mention of the discrepancy between the FLAC Analysis's use of 138 feet long piles and the PND Cost Comparison's use of 200 feet long pipe piles.

For the Alternative B Pile Supported Dock, in May 2005 (after MARAD issued its EA in March 2005), the POA claimed that design would involve:

4,000 pipe piles @\$15,000 each = \$60 million
Concrete deck = \$48 million

Exhibit MM, Anchorage Port Expansion Team, *Port of Anchorage Marine Terminal Expansion Project Design Alternative Selection Process Presentation* (May 5, 2005), at 62. The MARAD EA states that "4,005 steel pipe piles would be driven into the tideland bottom with a mechanical pile hammer" for that alternative. *Id.* at 2-73. For the 8,880

ICRC itself estimated the cost at \$2,150/ton, or \$2.15/lb. *Id.* These estimates may include the costs of transportation, labor and other materials. Even if, however, those additional costs reflect half the per pound cost, it still means that the bids for sheet pile were well above the \$0.50/lb. estimate in the PND Cost Comparison and upon which the Alaska District relied in selecting the OCSP design alternative as LEDPA.

length of the dock face,¹⁶ this would make the per foot cost $\$60,000,000/8,880 = \$6750.75/\text{foot}$. The POA predicted that sheet piles for all alternatives would cost \$83 million, or \$9,346.84 per lineal foot of the 8,880 foot dock face. Exhibit MM, *id.* at 61 - 63.¹⁷ Thus, accepting these raw steel numbers as accurate and ignoring other costs, the pipe pile design alternative would be *cheaper* per lineal foot of dock face than the OCSP design alternative.

The PND Cost Comparison does not use the \$15,000.00/pipe pile cost estimate, however. Instead, it shows that 36 inch x 1 inch x 200 feet long pipe piles would be used, that each would weigh 74,800 lbs., and that each would cost \$0.75/lb, or \$56,100.00 each. This is \$41,100.00 more per pile than the \$15,000.00 used in the cost estimate that both the MARAD EA and the POA used in 2005, a 274% difference. There is no evidence in any of the documentation indicating that the cost of a pipe pile --- or the cost of steel --- increased 274% between 2005 and 2007.¹⁸ In the Decision Document there is no citation to any data indicating that pipe pile increased in cost between the 2005 and 2007, much less increased 274% in cost. In any event, if the 274% increase actually occurred and was due to an increase in the price of steel, then the cost of sheet pile should have gone up 274% as well. As pointed out above, however, the PND Cost Comparison cost estimate for sheet pile per pound was \$0.05 per pound *lower*, not higher, than the 2004 cost estimate.

Finally, POA provided no written explanation to the Alaska District why the cost of a pipe pile per pound (\$0.75) is \$0.25 higher than the cost of sheet pile per pound (\$0.50). The Decision Document does not discuss the basis for any cost differential beyond saying that a cost engineer reviewed the estimates and found them reasonable.

One additional point needs to be made about piling and the accuracy of the PND Cost Comparison. For the OCSP cost, the estimate did not include an accurate count of the crane and fender pipe piles that would be installed. According to MARAD two crane pipe piles would be installed every 20 feet along approximately 4,800 feet of dock face. Exhibit NN, *Request for a Letter of Authorization to Allow Incidental Take of Marine Mammals during Phase II Construction Activities Associated with the Port of Anchorage*

¹⁶ The 8,880 number is used for illustrative purposes here. The dock face proposed in 2005 has since been shortened to 7,900 linear feet. Decision Document, at 9.

¹⁷ The MARAD EA uses the same sheet pile and lineal feet numbers, but without estimating a cost per sheet pile. *Id.* at 2-73, 2-68.

¹⁸ The PND Cost Comparison estimates costs for 1 inch x 200 foot long pipe pile. Terracon's 2005 seismic evaluation for the project, however, used a considerably shorter and lighter ¼ inch x 138 foot long pipe pile in finding that OCSP design was better able to withstand earthquakes than a presumably weaker, pipe pile supported dock design. Exhibit V, *FLAC Analysis*, at 4 (using pipe pile "wall thickness of 7mm (0.28-inch)"). Thus, perhaps the 2005 cost estimate of \$15,000/pipe pile was based on ¼" pipe pile. If so, the cost differential between 1 inch and ¼ inch pipe pile might partially explain the difference between the 2005 and 2007 costs estimates. But absent some reasoned explanation for doing so, using one sized pipe pile for assessing risk of the dock's failure in a seismic event and then later using a larger size pipe pile for evaluating costs for the purposes of the LEDPA analysis would be arbitrary and capricious, would bias the analysis, and would otherwise be inconsistent with the best available science standards in the OMB Guidelines and DOD Guidance.

Marine Terminal Development Project January 1, 2007 - October 31, 2012 (May 2006), Attachment A, at A-9. For the OCSP design alternative, however, there is no cost estimate for these two crane pipe piles in the PND Cost Comparison. Furthermore, no fender pipe piles are listed in the estimate although the *Request for a Letter of Authorization* states that two fender pipe piles would be placed every 32 feet along the OCSP face and each pipe pile would be 150 feet long. *Id.* at A-9; *see also id.* at 19, Table 4 (showing fender pile numbers, lengths, and weights).

c) Fill costs

The fill must be vibro-compacted during installation to eliminate air and moisture as much as possible before the fill is capped by concrete. The PND Cost Comparison contains no estimate of the cost of vibro-compaction. Vibro-compaction costs may or may not be substantial relative to the costs of other elements of the structure, but their omission from the PND Cost Comparison further biases the assessment in favor of the OCSP design.

There is an additional omission in the PND Cost Comparison concerning fill. For the South Extension portion for the project, the POA's 35% Drawings show a sub-trench dredging and gravel fill placement directly under the OCSP walls. Exhibit LL, ICRC Anchorage Port Expansion Team, PND Engineers, Inc., *Port of Anchorage Expansion Project September 2006 – Anchorage, Alaska - South Extension Drawings - 35% Drawings* (September 6, 2006) (excerpts), at South Extension Typical Section D-D. PND also has indicated that “Soils at the POA Expansion site are expected to be dense and may even require trenching for sheet pile installation in certain areas.” Exhibit OO, Letter from Garth K. Howlett, Senior Engineer, PND Engineers, Inc. to Chuck Casper, Project Manager, Integrated Concepts & Research Corp. (July 17, 2007), at 1. Yet the cost of this trenching and fill work is not accounted for in the PND Cost Comparison, or in the Decision Document, biasing the analysis.

d) Armor rock costs

The PND Cost Comparison also estimates that “Armor Rock” for a pipe pile supported dock section would cost \$100.00 per ton. But armor rock also is needed for OCSP. *See* Decision Document, at 9, 15 (noting that 1,000 feet of armor rock would be added at the north end of the dock, and that the POA was investigating adding more armor rock at other locations). Yet the PND Cost Comparison did not include any estimate for the cost of armor rock for the OCSP design. Because of this omission, it apparently understates the total cost differential between OCSP and either of the other versions of a pipe pile supported design.

What would the cost of armor rock add to total cost of the OCSP design? There is no information in the MARAD EA or Decision Document concerning the size of the armor rock that might be needed, the total tonnage of armor rock that would be needed, or its total cost. The three bidders mentioned previously bid "armor rock" at \$75.00, \$38.60, and \$39.00 per ton, respectively, while ICRC estimated "Armor Rock" at \$60.00 per ton and "Rip Rap, Pit Run" at \$10.00 ton. *See Exhibit KK, Abstract of Bids/Offers - 2007 Marine Terminal Redevelopment - Solicitation No.: 4406-2-S72 – Closing Date and Time: 2:00 P.M. 14 August 2007.* At \$100.00 per ton, the PND Cost Comparison estimate for armor rock that might be needed for the pipe pile design is far off from these bids.

In sum, the information the Alaska District used and presented in the Decision Document concerning costs and the selection of the LEDPA failed to satisfy the objectivity standard in the OMB Guidelines and DOD Guidance, impermissibly biasing the decision in favor of the applicant's choice among the alternatives.

VIII. INFORMATION ABOUT ESSENTIAL FISH HABITAT

A. Legal Background

The Magnuson-Stevens Act establishes a national program for the conservation and management of fishery resources. Congress believed that such a program was "necessary to prevent overfishing, to rebuild overfished stocks, to insure conservation, to facilitate long-term protection of essential fish habitats, and to realize the full potential of the Nation's fishery resources." 16 U.S.C. § 1801(a)(6). Congress declared Among the purposes of the Act are "to take immediate action to conserve and manage the fishery resources," and "to promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat." 16 U.S.C. § 1801 (b)(1) and (b)(7); *see also id.* § 1801(b)(1); *Natural Resources Defense Council, Inc. v. National Marine Fisheries Service*, 421 F.3d 872, 879 (9th Cir. 2005) ("The purpose of the Act is clearly to give conservation of fisheries priority over short-term economic interests."); *Natural Resources Defense Council v. Daley*, 209 F.3d 747, 753 (D.C. Cir. 2000) ("[U]nder the Fishery Act, the [National Marine Fisheries] Service must give priority to conservation measures").

In 1996 the Magnuson-Stevens Act was amended by the Sustainable Fisheries Act to include a habitat conservation tool in the form of an EFH mandate. "EFH" is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." 16 U.S.C. § 1802(10). NMFS's regulations for implementing EFH define "waters" to include all aquatic areas and their biological, chemical, and physical properties, while "substrate" includes the associated biological communities that make these areas suitable fish habitats. 50 C.F.R. § 600.10 and § 600. "Fish" is defined to

include “finfish, mollusks, crustaceans, and all other forms of marine animals and plant life other than marine mammals and birds.” 16 U.S.C. § 1802(12).

The EFH mandate requires Regional Fishery Management Councils to adopt federal Fishery Management Plans that describe and identify EFH for each federally managed species pursuant to guidelines issued under 16 U.S.C. § 1855(b)(1)(a), minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitats. 16 U.S.C. § 1853(a)(7). *See* the EFH rules at 50 C.F.R. Part 600, 67 Fed. Reg. 2343-03 (Jan. 17, 2002).

Federal agencies must consult with the NMFS on activities that may adversely affect EFH. 16 U.S.C. § 1855(b)92(“Each Federal agency shall consult with the Secretary with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat identified under this chapter.”); 50 C.F.R. § 600.920(a) (federal agencies “must consult with NMFS regarding any of their actions authorized, funded, or undertaken, or proposed to be undertaken that may adversely affect EFH”); *see also* 67 Fed. Reg. at 2361-63 (describing the consultation process). “Adverse effect” is very broadly defined. *See* 50 C.F.R. § 600.910(a).²⁰

The mandatory elements of the consultation process are described in 50 C.F.R. § 600.920(d) - (e). The consulting federal agency must submit to NMFS a written assessment of the effects of its proposed action on EFH; this written assessment may be combined with any required NEPA document. 50 C.F.R. § 600.920(e), (f). The written assessment must contain certain elements, including an analysis of the potential adverse effects and a conclusion regarding them, and proposed mitigation measures, all described with an appropriate level of detail. *Id.* (e)(2) - (3). If EFH will be adversely affected by the agency's proposed action, NMFS must make Conservation Recommendations (including avoidance and mitigation measures) to the consulting agency; these measures are advisory only. 16 U.S.C. 1855(b)(4)(A) (“If the Secretary receives information from a Council or Federal or State agency or determines from other sources that an action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by any State or Federal agency would adversely affect any essential fish habitat identified under this chapter, the Secretary shall recommend to such agency measures that can be taken by such agency to conserve such habitat.”); 67 Fed. Reg. at 2363 (“the recommendations from NMFS are advisory in nature”). The consulting agency must respond in writing to the recommendations, however. 50 C.F.R. § 600.920(k). In the case of a response that is inconsistent with NMFS Conservation Recommendations, the Federal agency

²⁰ 50 C.F.R. § 600.815(a)(4) lists dredge and fill, sedimentation, and other in-water activities like those which will take place during construction and operation of the POA project as having adverse impacts on EFH. Loss of prey species may also be considered an adverse effect on EFH if it reduces the quality of EFH. *Id.* § 600.815(a)(7).

must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects.

Id. § 600.920(k)(1). The substantive standard applicable to the entire process is that the

Federal agency and NMFS *must* use the *best scientific information available* regarding the effects of the action on EFH and the measures that can be taken to avoid, minimize, or offset such effects. Other appropriate sources of information may also be considered.

50 C.F.R. § 600.920(d) (emphasis added).²¹ Note that this obligation to use the best science information applies to both the consulting agency and to NMFS. The “best scientific information available” standard in 50 C.F.R. § 600.920(d) derives from the Magnuson-Stevens Act, where the phrase is used repeatedly. *See, e.g.*, 16 U.S.C. 1801(c)(3) (“It is further declared to be the policy of the Congress in this chapter... to assure that the national fishery conservation and management program utilizes, and is based upon, the best scientific information available); *id.* § 1851(a)(2) (“Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this subchapter shall be consistent with the following national standards for fishery conservation and management Conservation and management measures shall be based upon the best scientific information available”).

B. Alaska EFH

The criteria for establishing EFH are at 50 C.F.R. § 600.815(a). The *Alaska Essential Fish Habitat Environmental Impact Statement* (April 2005) identifies EFH in Alaska. The POA project area, including all of Knik Arm where the POA is located, has been designated EFH. *See* MARAD EA at 3-98 (“All of Cook Inlet is designated EFH for both juvenile and adult life stages of Pacific cod, walleye Pollock and sculpins all ... [freshwater] water bodies that currently support or historically supported anadromous fish species (e.g., salmon) are considered freshwater EFH. Marine EFH for salmon fisheries ... include all estuarine and marine areas used by Pacific salmon of Alaska origin, extending from the influence of tidewater and tidally submerged habitats to the limits” of U.S. jurisdiction); *see also* Decision Document, at 67-78 (acknowledging that the POA project would impact EFH).

Attached at Appendix G to the *Alaska Essential Fish Habitat Environmental Impact Statement* is NMFS's *Non-fishing Impacts to Essential Fish Habitat and Recommended Conservation Measures* (April 2005) (“Appendix G”). Appendix G describes categories of actions (other than fishing) that may adversely affect EFH. This

²¹ The word “must” in the quoted text is defined in 50 C.F.R. § 600.900(d) by reference to 50 C.F.R. § 600.305(c)(a), which states that “Must is used, instead of ‘shall’, to denote an obligation to act; it is used primarily when referring to requirements of the Magnuson-Stevens Act, the logical extension thereof, or of other applicable law.” *Id.*

listing includes impacting activities directly relevant to the POA project, such as dredging, disposal of dredged material, filling, vessel operations, and pile installation (including pile driving) and pile removal, and others. *Id.* at G-22 *et seq.* For each of these activities, Appendix G includes a list of recommendations for avoiding, mitigating, or compensating for the loss of EFH. *Id.* § G.1.4, at G-3. Each list of recommendations is relatively detailed and sometimes quite long. *See, e.g.*, the list of recommendations for pile driving, at § G.4.5.1.2, G-31 - 32 (five recommendations enumerated, one with three sub-recommendations). These recommendations are not exclusive or mandatory, but instead provide a “menu” of recommendations for NMFS and the consulting agency to chose from. *Id.* § G.1.4 at G-3 (menu); *id.* (“useful to NMFS biologists ... useful for federal action agencies undertaking EFH consultations, especially in preparing EFH assessments”). Appendix G “is not meant to provide an exhaustive review,” but is a “result of a collaborative effort” of NMFS Regional Offices “which provided a broader range of expertise to reach consensus regarding potential impacts and the general conservation recommendations.” *Id.* § G.1.5 at G-4. In other words, Appendix G is a compendium of the “best scientific information available” on assessing impacts to EFH and identifying mitigating measures *unless* a better source of information is available. 50 C.F.R. § 600.920(d).

C. Information Deficiencies Concerning EFH Impacts and Mitigation

The Alaska District’s presentation of the information evaluating impacts to EFH was biased because the Alaska District downgraded the habitat’s value in order to give the perception that the impacts to the EFH were insignificant and thereby to justify the decision to allow destruction of the EFH for the POA project. The substance of the information presented about EFH also was inaccurate, unreliable, and biased, and failed to meet the best available science standard required by the DOD Guidance.

First, the Alaska District’s presentation of the information was biased because it painted the EFH at the POA as neither “critical” habitat to rearing salmon nor otherwise “unique” and therefore not worthy of saving as “essential.” Decision Document, at 37 (not critical), 68 (not unique), 73 (not critical or unique); *but see id.* at 20 (quoting a USFWS comment that “the project site is critical to rearing salmon from all Knik Arm tributaries, especially Ship Creek”). That the Alaska District thinks the EFH is not “critical” or “unique” is irrelevant. Under 50 C.F.R. § 600.815, “Areas described as EFH will normally be greater than or equal to aquatic areas that have been identified as [ESA] ‘critical habitat’ ” and the extent of the EFH

should be based on the *judgment of the Secretary* and the appropriate Council(s) regarding the quantity and quality of habitat that are *necessary* to maintain a sustainable fishery and the managed species' contribution to a healthy ecosystem.

Id. (a)(1)(iv)(D), (E) (emphasis added). After habitat is designated as “essential” by the Secretary and appropriate Council, that ends the matter. No statute gives a consulting agency contemplating an action that may adversely impact EFH the leeway to ignore that

designation by claiming the habitat is other than essential. Instead, the action agency must abide by the duties to consult with NMFS, to evaluate the impacts and mitigation measures using the best science available, and either to follow any conservation recommendations suggested by NMFS or to explain why it will not. *See* 50 C.F.R. § 600.920(d) – (k).

Here, the Alaska District presented information in the Decision Document in a way that impermissibly biased the evaluation of the POA project’s impacts to EFH in violation of the DOD Guidance. By claiming that the EFH was neither critical nor unique, it tried to create the perception that the EFH was not “necessary to maintain a sustainable fishery and the managed species' contribution to a healthy ecosystem” when that “necessary” determination had already been made conclusive by the Secretary and Council. 50 C.F.R. § 600.815(a)(1)(iv)(E).

Second, because the Alaska District did not apply the information concerning impacts and mitigation available in Appendix G, the substance of the information in the Decision Document about EFH was inaccurate, unreliable, and biased, and failed to meet the best available science standard in compliance with DOD Guidance. The Decision Document does not methodically address the mitigation measures listed in Appendix G which are pertinent to dredging, disposal of dredged material, filling, vessel operations, pile installation, and pile removal (necessary when the old port is dismantled), and the other categories of impacts described in Appendix G and relevant to the project. While the Decision Document’s EFH discussion does mention pile driving and filling, *id.* at 72, there is no discussion in the Decision Document of each of the Appendix G mitigation recommendations pertinent to those impacting activities.

As to the impacts from dredging, Appendix G suggests that upland disposal sites be considered, and that only disposal sites that minimize adverse effects to EFH be selected, that beneficial uses of dredged materials be considered, and that the disposal site within EFH be minimized, or avoided entirely. *Id.* § G.4.2.1.2 at G-25, paras. 1, 3, and 5. Yet none of these recommendations is mentioned within the EFH section of the Decision Document. *See id.* at 67-74.

Similarly, for pile removal --- many piles will be removed when the existing dock facilities at the POA are dismantled --- there is no discussion of any of the Appendix G recommendations. *See id.* at G.4.5.2.2 at G-32-33 (enumerating five recommendations with four additional subparts).

These omissions in the Decision Document render its EFH-related information incomplete and therefore inaccurate, unreliable, and biased in support of the decision the Alaska District reached, in violation of the DOD Guidance.

Because the Decision Document does not address the impacts and mitigation information in Appendix G, much less make any express reference to Appendix G, it also is apparent that the information concerning EFH in the document does not meet the best available science standard of the DOD Guidance. *See* DOD Guidance (requiring

application of the “best available, peer reviewed science and supporting studies conducted in accordance with sound and objective scientific practices”); *see also* 50 C.F.R. § 600.920(d) (“best scientific information available regarding ... the measures that can be taken to avoid, minimize, or offset such effects”). Of course, the EFH regulations do not expressly require the consulting agency to cite or use Appendix G in evaluating impacts to EFH and determining appropriate mitigation. The Decision Document, however, does not indicate the sources of best available science that the Alaska District used either to evaluate impacts or to evaluate mitigation measures in lieu of using the scientific information provided in Appendix G. Thus, the information concerning EFH impacts and mitigation measures in the Decision Document is not only unreliable as a matter of substance, it also does not satisfy the best available science standard in the DOD Guidance.

IX. INFORMATION ABOUT AIR QUALITY

A. Information Deficiencies Concerning SIP Conformity

The Clean Air Act creates a framework for the “development of cooperative Federal, State, regional, and local programs to prevent and control air pollution.” CAA § 101(a)(4), 42 U.S.C. § 7401(a)(4). Under the Act, the EPA sets National Ambient Air Quality Standards (“NAAQS”), “the attainment and maintenance of which . . . are requisite to protect the public health.” 42 U.S.C. § 7409(b)(1). In 1971, the EPA promulgated NAAQS for six criteria pollutants, including carbon monoxide (“CO”). 36 Fed. Reg. 8186 (1971); 40 C.F.R. pt. 50. In past years the EPA classified Anchorage as a “serious non-attainment area” for CO; it is now a “maintenance” area for CO.

Each State must submit to EPA a State Implementation Plan (“SIP”) that “specif[ies] the manner in which [NAAQS] will be achieved and maintained within each air quality control region” in the State. 42 U.S.C. § 7410(a). As summarized by the EPA, “the purposes of a SIP . . . are to make demonstrations (of how attainment, maintenance, and progress will be achieved) and to provide a control strategy that will achieve the necessary reductions and otherwise meet the requirements of the Act.” State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 Fed. Reg. 13,498, 13,567 (Apr. 16, 1992). SIPs are subject to EPA review and approval. 42 U.S.C. § 7410(l).

The Clean Air Act prohibits federal agencies from engaging in or supporting any activity before determining either that the activity is in “conformity” with the applicable SIP, or that the air pollutant emissions from the activity will be “de minimis” such that a full conformity determination is unnecessary. 42 U.S.C. § 7506(c)(1); 40 C.F.R. §§ 51.853(b), 93.153(b).²² Each Federal agency ordinarily is required to make its own conformity determination before approving a proposed action. 42 U.S.C. § 7506(c)(1)

²² For CO, the “de minimis” threshold is 100 tons per year. 40 C.F.R. § 93.153(b)(1). Thus, if the CO emissions associated with the Permit for the POA project in a given year are projected to be greater than 100 tons, a full conformity analysis is required to determine whether the project conforms to the Alaska SIP.

(“The assurance of conformity to such implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality.”); 40 C.F.R. § 93.154 (emphasis added) (“Any Federal department, agency, or instrumentality of the Federal government taking an action subject to this subpart *must make its own conformity determination* consistent with the requirements of this subpart. In making its conformity determination, a Federal agency must consider comments from any interested parties. Where multiple Federal agencies have jurisdiction for various aspects of a project, a Federal agency may choose to adopt the analysis of another Federal agency or develop its own analysis in order to make its conformity determination.”).

The Alaska District did not make its own conformity determination. The Decision Document states:

8.5 Section 176(c) of the Clean Air Act General Conformity Rule Review:

The proposed project has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined the activities proposed under this permit will not exceed *de minimis* levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR PART 93.153. This no-effect determination has been coordinated with the U.S. Environmental Protection Agency and the Alaska Department of Environmental Conservation. Any later indirect emissions are generally not within the Corps continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this individual permit.

Decision Document, at 105 (bold in original). This statement is at best unclear, and it is misleading.

The Alaska District itself did not consult either EPA or the Department of Environmental Conservation. After the Permit was issued the Alaska District indicated that it actually relied on the conformity analysis in MARAD's EA. Exhibit PP, Email from Ryan H. Winn, Alaska District, to Mike Frank, Trustees for Alaska (Aug. 31, 2007, 12:39 P.M.) (“The U.S. Maritime Administration (MARAD), as the lead federal agency for the project, is required to conform with the requirements of the Clean Air Act. The MARAD calculated worst case scenario projected CO and PM10 calculations for the port expansion project and determined that *de minimis* levels would not be exceeded.”), and Email from Trustees for Alaska Mike Frank to Alaska District's Ryan H. Winn (Sept. 5, 2007, 1:47 P.M.) (“I apparently misunderstood the COE Decision Document, § 8.5, at p. 105, to mean that the COE undertook its own conformity analysis. I now understand from your email that the COE did not do so but instead reline on the MARAD conformity analysis in its 2005 EA. If I am still misunderstanding something in this regard, please let me know.”). The Decision Document doesn't expressly claim that, however; it only refers to alleged consultations with EPA and the State Department of Environmental Conservation. Thus, the Decision Document presented and contained inaccurate information concerning conformity, in violation of the DOD Guidance.

Under 40 C.F.R. § 93.154, an agency sharing jurisdiction with another agency over aspects of a project may adopt the conformity determination of that agency. This assumes, however, that the project analyzed by the two agencies is the same. MARAD completed its analysis of conformity prior to the publication of its EA in March 2005. Before the Alaska District issued its Permit decision in August 2007, a number of aspects of the project changed, as did the project's scheduling. Even had it intended to do so, the Alaska District was not free to adopt the MARAD's conformity analysis without taking those changes into account.

B. Information Deficiencies Concerning Air Quality Impacts

The Decision Document states that a "secondary impact" of the project will be "decreased in air quality." *Id.* at 93. But it claims that the total emissions of each criteria pollutant would not exceed 100 tons per year. *Id.* at 105.

Aside from CO and PM₁₀, the Decision Document does not quantify the emissions of the criteria pollutants that will be emitted during the project's construction. In any event, under the Clean Air Act the gross amount of emissions stated in tons per year is only relevant to a determination of whether a conformity analysis is required or whether the annual emissions of a particular pollutant from a source stated in tons per year are over regulatory thresholds such that various permit or other regulatory requirements apply. The more directly relevant measure of air quality is whether the outdoor air meets the NAAQS and corresponding Alaska ambient air quality standards ("AAQS") set by EPA and the Alaska Department of Environmental Conservation.²³ These are measured in terms of concentrations of pollutants in the outdoor air rather than in terms of tons per year. The Decision Document does not discuss whether the construction and operation of the POA will increase the concentrations of those pollutants in the ambient air and thereby threaten a violation of the NAAQS/AAQS. Depending upon the weather, timing, equipment used, and so on, it is certainly conceivable that emissions from a combination of vessels, normal truck traffic hauling cargo to and from the port, Alaska Railroad activity, bulk storage and transport of dry bulk materials, and non-road engines used during port construction could create a high concentration of pollutants that might threaten a violation of the NAAQS/AAQS.

Thus, the Decision Document presents incomplete information concerning the project's air pollution impacts, thereby biasing its analysis in favor of the Alaska District's Permit decision.

²³ NAAQS/AAQS have been set for CO, PM₁₀, sulfur oxides measured as sulfur dioxide (SO₂), reduced sulfur compounds expressed as SO₂, nitrogen dioxide (NO₂), ozone, lead, and ammonia. *See* 18 AAC 50.010. Marine engines are also a source of PM (black carbon) emissions, *see* 59 Fed. Reg. 31,306, 31,307 (June 17, 1994), and marine engines and other "nonroad engines" are sources of nitrogen oxides (NO_x) emissions. Section 216(10) of the Clean Air Act, 42 U.S.C. § 7550(1), defines the term "nonroad engine" as "an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 111 or 202," such as the heavy construction equipment that will be used in the construction of the POA project. *Id.*

X. INFORMATION ABOUT COMPENSATORY MITIGATION REQUIREMENTS

When the grant of a Section 404 permit will cause unavoidable adverse impacts to an aquatic ecosystem, the applicant must submit a detailed compensatory mitigation plan that meets certain standards for the Corps' approval. The proposed compensatory mitigation plan must be made available for the public's review and comment before the Corps approves it. The Corps must then include terms in the permit that assure successful implementation of the plan.

These requirements were not met here. The Public Notice and Decision Document presented inaccurate and incomplete information concerning compensatory mitigation in violation of the information quality objectivity standard.

A. Legal Background

Under the Section 404(b)(1) Guidelines, the discharge of dredged or fill material may not be permitted if (1) a practicable alternative exists that is less damaging to the aquatic ecosystem or (2) the waters of the United States would be significantly degraded. 40 C.F.R. § 230.10(a), (c). Even if those two pre-conditions are satisfactorily resolved, a permit may only be issued if the applicant also demonstrates that "appropriate and practicable steps have been taken which will *minimize* the potential adverse effects of the discharge on the aquatic ecosystem." 40 C.F.R. § 230.10(d) (emphasis added).

To further address how mitigation, i.e., minimization, of adverse effects of a permitted discharge will be achieved under the Section 404(b)(1) Guidelines, the Corps and EPA entered into a *Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency: The Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines* ("MOA"), 55 Fed. Reg. 9210 (Mar. 12, 1990). This MOA

provides guidance to Corps and EPA personnel for implementing the Guidelines and *must be adhered to* when considering mitigation requirements for standard [individual] permit applications. The Corps will use this MOA when making its determination of compliance with the Guidelines with respect to mitigation for standard permit applications.

Id. 55 Fed. Reg. at 9211 (emphasis added). Furthermore, unavoidable impacts must be addressed during the permitting process:

The Corps, except as indicated below, first makes a determination that potential impacts have been avoided to the maximum extent practicable; *remaining unavoidable impacts will then be mitigated* to the extent appropriate and practicable *by requiring* steps to minimize impacts, and, finally, *compensate* for aquatic resource values.

55 Fed. Reg. at 9211-12 (emphasis added).

“Avoidance” is part and parcel of the LEDPA determination process. “The thrust of this section [40 C.F.R. § 230.10(a)] on alternatives is avoidance of impacts.” 55 Fed. Reg. at 9212 (footnote omitted). Consequently, “Mitigation requirements shall be conditions of standard Section 404 permits.” *Id.* at 9213. “If the mitigation plan necessary to ensure compliance with the Guidelines is not reasonably implementable or enforceable, the permit shall be denied.” *Id.* (emphasis added).

As for “compensatory” mitigation, in evaluating it the Corps must consider the “functional values” lost by the resource to be impacted and based upon that consideration

[a]ppropriate and practicable *compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required.* Compensatory actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands) should be undertaken, when practicable, in areas adjacent or contiguous to the discharge site (on-site compensatory mitigation). If on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable (i.e., in close physical proximity and, to the extent possible, the same watershed). *In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered.* Generally, in-kind compensatory mitigation is preferable to out-of-kind.

id. 55 Fed. Reg. at 9212 (emphasis added); *see also id.* at 9211 (“The determination of what level of mitigation constitutes ‘appropriate’ mitigation is based solely on the values and functions of the aquatic resource that will be impacted.”). Since the goals are “to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources,” the

[m]easures which can accomplish this can be identified only through resource assessments tailored to the site performed by qualified professionals because ecological characteristics of each aquatic site are unique. Functional values should be assessed by applying aquatic site assessment techniques generally recognized by experts in the field and/or the best professional judgment of Federal and State agency representatives, provided such assessments fully consider ecological functions included in the Guidelines. The objective of mitigation for unavoidable impacts is to offset environmental losses.

Id. at 9212. In sum, once functional values are identified and assessed, appropriate compensatory mitigation must be identified. In some instances, appropriate monitoring conditions need to be identified as well. *Id.* at 9213.

The Corps issued a Regulatory Guidance Letter (“RGL”) to further address compensatory mitigation. *U.S. Army Corps of Engineers Regulator Guidance Letter (“RGL”), No. 02-2 (Dec. 24, 2002).*²⁴ The RGL No. 02-2’s compensatory mitigation

²⁴ Available at <http://www.usace.army.mil/cw/cecwo/reg/rgls/RGL2-02.pdf>. RGLs provide mandatory guidance to the Corps district offices. *See* <http://www.usace.army.mil/cw/cecwo/reg/rglsindx.htm>.

requirements roughly parallel those of the MOA, albeit giving much more detail as to what is required before approving a permit. RGL No. 02-2 indicates that because “ecological characteristics of aquatic sites are unique ... when possible, Districts should use a functional assessment by qualified professionals to determine impacts and compensatory mitigation requirements.” *Id.* at 2. RGL No. 02-2 includes extensive requirements for the development and contents of draft mitigation plans. *Id.* at 8 - 11. For “Baseline Information,” RGL No. 02-2 requires that “[a]s part of the permit decision Districts will include approved written compensatory mitigation plans describing the location, size, type, functions and amount of impact to aquatic and other resources in the mitigation project.” *Id.*, § 3a., at 8. This information is to include the acreage of wetlands, “length and width of streams, elevations or existing ground at the mitigation site, historic and existing hydrology, stream substrate and soil conditions, and timing of mitigation.” *Id.* For “Goals and Objectives,” the

[c]ompensatory mitigation plans should discuss environmental goals and objectives, the aquatic resource type(s) ... and functions that will be impacted by the authorized work, and the aquatic resource types(s) and functions proposed at the compensatory mitigation sites(s)... . The objective statement should describe the amount, i.e., acres, linear feet, or functional changes, of aquatic habitat that the authorized work will impact and the amount of compensatory mitigation needed to offset those impacts, by aquatic resource type.

Id. at 8 - 9. Compensatory mitigation plans are also required to discuss the “factors considered during the [mitigation] site selection process and plan formulation” *Id.* at 9. A detailed “Mitigation Work Plan” and “Performance Standards” are required to be in the plan. *Id.* All parties responsible for compliance with the plan, and their roles, must be identified; a written description of the legal means for protecting the mitigation areas must be included; a contingency plan must be included for unanticipated site conditions or changes; and a short and long term monitoring plan must be included. *Id.* at 10 - 11. Once the plan is developed, the RGL No. 02-2 indicates that for individual [standard] permits, “*Proposed* compensatory mitigation will be made available for public review and comment” *Id.* at 6 (emphasis added).

RGL No. 02-2 directs the Corps district office to include in each individual permit that is issued the compensatory mitigation requirements and conditions (1) identifying the party that must meet the requirements, (2) “performance standards for determining compliance,” and (3) other “requirements such as financial assurances... monitoring programs, and provisions for short and long-term maintenance of the mitigation site.” *Id.* at 7; *see also id.* at 8 - 11. While the impacting activity may begin before a required compensatory mitigation project is initiated, nonetheless there must first be in place a Corps-approved mitigation plan, a secured mitigation project site, and financial assurances. *Id.* at 7.

The Alaska District office has issued a Compensatory Mitigation Plan Checklist that

is intended to as a technical guide for ... applicants preparing compensatory mitigation plans... . The purpose of this document is to identify the types and extent of information that agency personnel need to assess the likelihood of success of a mitigation proposal.

Corps Public Notice SPN-2004-07 (June 10, 2004), *Special Public Notice 04-07 Final Alaska District Compensatory Mitigation Guidelines*, Supplement at 2. This Checklist provides a much more detailed listing of subjects that should be address for mitigation plans under subject headings similar to those used in RGL No. 02-2, e.g., Baseline Information, Goals and Objectives. The Checklist notes that while “every mitigation plan may not need to include each specific item, applicants should address as many as possible and indicate, when appropriate, why a particular item was not included” *Id.*

B. Information Deficiencies

The Alaska District’s April 22, 2005, Public Notice for the proposed permit asserts that the project would include “compensation for the loss of Essential Fish Habitat (EFH) and tidelands” and that “specific proposals for mitigation ... will be identified as part of this Section 404 permitting process with the USACE and appropriate resource agencies.” *Id.* at 9. It further indicates that “The mitigation plan would be finalized *prior* to the issuance of a Department of the Army permit for the overall Port Expansion Project.” *Id.* at 2 (emphasis added).

As it turned out, these statements in the Public Notice presented inaccurate, or at best misleading, information because in the end, the Alaska District issued a Permit that does not compensate for the loss of EFH by securing other comparable EFH. The Permit also does not identify specific compensatory mitigation proposals and require that each be implemented under the Permit.

In fact, the Alaska District never made available for public review or for public comment a proposed compensatory mitigation plan, in violation of RGL No. 02-2’s public involvement requirement. *See id.* at 6. The Alaska District could not comply with the RGL because it never required the POA to submit a draft compensatory mitigation plan that could be distributed for public review. The Decision Document indicates that at some point MARAD and the Port developed a “conceptual” mitigation plan, but that “In response to recommendations from resource agencies, the previous plan was cancelled by the applicant” *Id.* at 17.²⁵ No new plan was submitted as a substitute for the cancelled “conceptual” plan.

²⁵ The draft conceptual plan was apparently released in 2005. Integrated Concepts & Research Corporation, *Draft Mitigation Concept Plan Port of Anchorage Intermodal Expansion Project Marine Terminal Redevelopment Project, Contract No. DTMA1D03009 Contracted with US Department of transportation Maritime Administration, ICRC – Infrastructure Support Services Division* (July 2005).

Instead of complying with RGL NO. 02-2 and following through on what it told the public in the Public Notice would happen, the Alaska District adopted the following conditions in the Permit dealing with compensatory mitigation:

The following conditions are required to compensate for resource losses important to the human and aquatic environment. (33 CFR 320.4(r) and 40 CFR Parts 230.41 and 230.42)]

1. The Port of Anchorage shall provide funding equivalent to the monetary value of the debits of the authorized project impacts, as determined by the Anchorage Debit Credit Methodology, in accordance to the attached Memorandum of Agreement (MOA) concerning compensatory mitigation for the overall project. Compensatory mitigation funds for the account will be allocated primarily for construction related costs of selected mitigation projects, as specified in the MOA. In addition to the funding requirements, the Port of Anchorage shall provide for the project management actions necessary to obtain any applicable permits and/or authorizations, the preparation of necessary engineered designs, and monitoring of all selected mitigation projects as necessary.
2. In addition to the mitigation requirements specified above, the Port of Anchorage shall conduct a feasibility study to identify the most practicable and beneficial aquatic habitat restoration, enhancement, creation, and preservation projects available in the Lower Ship Creek watershed and estuary. The projects identified in this study will be used by the Corps, under consultation with a mitigation advisory committee (consisting of federal state, and local resource agencies and other applicable stakeholders, as appropriate) to determine which project(s) shall be implemented and funded as part of the compensatory mitigation requirements of this permit. The content of the final feasibility study plan shall be approved by the Corps to ensure compliance with this requirement.

Permit, § VIII at 7. While these Permit conditions require the creation of a compensatory mitigation fund, the Permit does not specify particular compensatory mitigation projects that must be implemented. It only requires the POA to conduct a “feasibility study” of potential compensatory projects. *Id.* at para. 2.

The Memorandum of Agreement appended to the Permit promises the creation of a Mitigation Advisory Committee that will recommend mitigation projects. Permit, Memorandum of Agreement, § 3.1 at 2. The Memorandum of Agreement sets a Time for Performance of five years, "if practicable." *Id.* § 6.1 at 9. It outlines possible compensatory mitigation projects for prioritization by the Alaska District, Municipality, and the advisory committee. These potential projects are only described in brief generalities, and would be located in the Chester Creek, Six Mile Creek, or Ship Creek drainages.²⁶ But the Memorandum of Agreement notes that even this list “is not absolute

²⁶ Unlike Ship Creek, Six Mile Creek and Chester Creek are not adjacent to the project.

and does not limit other Knik Arm tributaries or projects which may be later identified,” and it allows for “other restoration, enhancement, and/or preservation projects approved by the Corps” if any of those projects identified in the three creeks are not feasible. *Id.* § 4.6, § 4.7, at 7. At the time the Permit was issued, none of these possible mitigation projects had a fully developed mitigation plan.

While the Memorandum of Agreement addresses some of the elements that RGL No. 02-2 requires to be part of a compensatory mitigation plan (such as financial assurances), it is not the detailed mitigation plan contemplated either by the RGL or by the mitigation MOA between the Corps and EPA, or by the Alaska District's own Checklist for compensatory mitigation plans. For example, the Memorandum of Agreement includes no data responsive to the RGL No. 02-2's Baseline Information and Goals and Objectives requirements, no monitoring plan, no contingency plan, no discussion of the legal means for protecting the sites to be enhanced or protected, no remedial plan in case things go awry, and so on. *Id.* at 8 – 11. These omissions are also inconsistent with requirements in the MOA between the Corps and EPA. 55 Fed. Reg. at 9212 (emphasis added) (“For projects to be permitted involving mitigation with higher levels of scientific uncertainty, such as some forms of compensatory mitigation, long term monitoring, reporting *and potential remedial action should be required.*”).

The Memorandum of Agreement contains no assessment of the likelihood that any of the listed mitigation projects chosen off the list would actually compensate for the lost aquatic functions and destroyed EFH. In fact, the USFWS asserted that the financial calculations for compensatory mitigation did not include any compensation for unavoidable project effects on movements and migration of anadromous fish. Exhibit QQ, Emails from Phil Brna, USFWS, to Ryan H. Winn, Alaska District (Aug. 9, 2007, 9:37 a.m. and 4:23 p.m.). Earlier, the USFWS had specifically requested that the Corps not grant a permit for Phase II until after a *complete* mitigation plan had been developed and approved. Exhibit J, Letter from USFWS Alaska Field Supervisor Ann J. Rappoport to Alaska District Colonel Timothy J. Gallagher (Mar. 17, 2006), at 6. The Permit's conditions related to mitigation and the Memorandum of Agreement ignore the USFWS's comments and recommendations. Thus, the intimation in the Decision Document that mitigation would replace the lost aquatic functions and destroyed EFH are biased and unreliable. Decision Document, at 16 – 18.²⁷

In addition to the inconsistencies between the promises in the Public Notice concerning mitigation and the actual Permit conditions, the Permit is inconsistent with the Decision Document in other respects as well. The Decision Document promises that for wetland losses at the EAFB fill borrow sites, “mitigation projects [on Six Mile Creek] would be *requirements* of the DA permit, if issued.” *Id.* at 55 (emphasis added). Those

²⁷ Since “[t]he objective of mitigation for unavoidable impacts is to offset environmental losses,” if the permit applicant has not submitted a mitigation plan to the Corps, the Corps cannot determine if that objective will be met. 55 Fed. Reg. 9212. When that is the case, the Corps is required to deny the permit application. *Id.* (emphasis added) (“If the *mitigation plan necessary to ensure compliance* with the Guidelines is not reasonably implementable [*sic*] or enforceable, the permit shall be denied.”). Here, however, the Alaska District granted the Permit even though there was no genuine mitigation plan in place.

requirements are not in the Permit, however. The Decision Document also indicates that other mitigation conditions would be imposed to mitigate impacts to birds and wood frogs caused by the loss of wetlands. These mitigation conditions also are not requirements of the Permit. *Id.* at 55.

In sum, because of these omissions and inconsistencies, the Public Notice, Permit and Decision Document presented inaccurate, unclear, incomplete, unreliable and biased information to the public in violation of the OMB Guidelines and DOD Guidance.

XI. RECOMMENDATION FOR CORRECTIVE ACTION

Because the Alaska District's permitting decision is based on information that does not comply with the OMB Guidelines and DOD Guidance, requestors ask that the Corps:

- 1) immediately revoke Permit No. POA-2003-502-N granted to the permittee POA; and
- 2) direct the Alaska District to withdraw the Decision Document until its contents meet the information quality standards as set out in the OMB Guidelines and DOD Guidance.

XII. HOW THE ERROR AFFECTS AND A CORRECTION WOULD BENEFIT THE REQUESTORS

The requestors are adversely affected by the disseminated information challenged in this Request for Correct of Information.

Each requestor uses information provided by governmental agencies in order to educate their staffs, members, supporters, and the general public about matters of environmental and economic concern pertinent to the missions of the requestors. When the information provided by a governmental agency is inaccurate, unclear, incomplete, unreliable, or biased, as it is here, a requestor is unable to fulfill that educational function and cannot perform its mission.

Because the information disseminated by the Alaska District did not meet the information quality standards, the requestors are unable to fulfill their mission to inform the public concerning the adverse environmental and economic aspects of the POA expansion project. Requestors did not receive reliable and accurate information concerning the POA expansion project. They needed accurate and reliable information in order to correctly assess the magnitude of the project's environmental (and economic) impacts and to make an informed decision whether any of the project alternatives could comply with federal and Alaska statutes and regulations. This is important to the requestors not only because of the educational function they perform, but also because the environmental impacts of the project will adversely affect the public's and the requestors' interests in maintaining a vibrant and healthy Cook Inlet, including clean water and healthy fish and marine mammal populations, for this and future generations.

In addition to their interest in the natural resource impacts of the project, the requestors have an interest in its economic impacts. In that regard, the challenged information includes an inaccurate and unreliable estimate of the actual costs of the project alternatives. This led the Alaska District to select an alternative for the project that allegedly had substantially lower costs than the other more environmentally benign alternatives. This error may ultimately result in the expenditure of greater public funds than is necessary to repair and expand the POA, which in turn will adversely affect the requestors' members, supporters and the general public.

The sought-after corrective action will benefit requestors, their staffs, members and supporters, and the general public because it will result in the withdrawal of documents containing information that has been disseminated and that does not meet the OMB Guidelines and DOD Guidance, and it will ultimately cause the Corps Corporate Information office to reverse the decision of the Alaska District to grant the Permit for the project. Thereafter, should the POA wish to pursue the project, the corrective actions should lead the Alaska District to collect, analyze, and disseminate only information about the project that meets the quality standards, and to assess correctly the environmental impacts and other aspects of the proposed project. This in turn will ensure that the construction of any improvements at the POA will not violate the Clean Water Act, the NEPA, the Rivers and Harbors Act, and the Magnuson-Stevens Act, thereby serving requestors' and the public's interests in the enforcement of federal laws.

CONCLUSION

The OMB Guidelines indicate that they are designed to

help agencies ensure and maximize the quality, utility, objectivity and integrity of the information that they disseminate (meaning to share with, or give access to, the public). *It is crucial that information Federal agencies disseminate meet these guidelines.*

* * *

[It] is clear that agencies should not disseminate substantive information that does not meet a basic level of quality.

67 Fed. Reg. at 8452 (emphasis added). The Alaska District did not disseminate information about the POA project that met this standard.

The POA Director pressured the Alaska District for a permit decision, at one point going over the Alaska District to the commander of the Corps's Pacific Ocean Division Command to complain that any further postponement would cause a "severe impact on the economy of Alaska and the security of the United States" and requesting that the commander "look into whether the Corps of Engineers is complying with its own policies to avoid abuse of process and unnecessary delay." Exhibit RR, Letter from William J. Sheffield, POA Port Director to Brigadier General John W. Peabody, U.S. Army Corps of Engineers, Pacific Ocean Division POD HQ (May 21, 2007). Given that pressure, and

given that PND claims a patent on the OCSP design favored by the POA Director, the Alaska District should have been especially vigilant in ensuring that all the information supplied by the project's proponents was subject to independent investigation and verification using best available, peer reviewed science and using sound statistical and research methods. In many crucial respects, however, the quality of the information in the Decision Document and used in the decision making concerning the Permit does not satisfy the high information quality standards in the OMB Guidelines and DOD Guidance.

The foregoing discussion relates to information quality deficiencies under the OMB Guidelines and DOD Guidance and IQA. Federal environmental statutes and regulations have not been discussed at length here. But like the USFWS, NMFS, and EPA, the requestors believe that the Alaska District is required by NEPA to prepare an EIS for the project, and further believe that there are serious problems with the Alaska District's decision under other environmental laws as well. The sheer size of the project counsels the Corps' chain of command to closely scrutinize the legitimacy of the Alaska District's decision under the federal environmental laws as well as under the IQA, and to act quickly to correct the decision.

Thank you in advance for your anticipated prompt response to this Request for Correction of Information.

TRUSTEES FOR ALASKA

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Does Alaska need a \$700 million port?

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Down at the docks, former Gov. Bill Sheffield is leading an expansion of Anchorage's port that is huge, controversial and increasingly expensive.

The latest price estimate: up to \$700 million.

The project is so big that even the consultants have consultants.

The plan isn't just for a bigger dock. The port aims to tear out the old structure section by section and build an entirely new one twice as long.

The design is unconventional. Instead of familiar pilings supporting a dock, the plan is for crews to erect a long wall of steel in Knik Arm. Millions of tons of gravel will fill in between the steel wall and land, more than doubling the land mass of a port now hemmed in by Elmendorf Air Force Base. The gravel will be packed into an area now used by salmon and belugas, then paved over with asphalt and concrete.

Sheffield, the port director since 2001, is relentless in his pursuit of the project. He is a political ally of U.S. Rep. Don Young, who along with U.S. Sen. Ted Stevens has steered tens of millions in earmarks to the expansion.

Some biologists fear the project could harm salmon and beluga whales. Some engineers aren't convinced the new dock will hold up in a devastating earthquake. Environmentalists question why it didn't get a more thorough government review. Neighbors worry about what all that new land will be used for.

Port officials and their engineers say the project is sound and necessary to replace an old dock that has outlasted its expected life span. The design may not be familiar in Anchorage, but it's been used all over Alaska.

The project is still in early stages. Project managers just awarded the biggest contract so far, \$95 million for work this summer and next that includes installing the first sheet pile and filling the horseshoe shapes with gravel.

Sheffield and a team under his watch are trying to pull off the biggest public works project in the history of Anchorage. If they succeed, supporters say, enough ships will come to justify it, and the salmon will still migrate. If all goes well, most people will never even notice.

BIG NEW WATERFRONT

Most people take the port for granted, but 75 percent of the goods sold in Alaska come through it. Cookies and milk, Dockers and Crocs, bikes and SUVs -- it all arrives on cargo ships that dock in Anchorage twice a week, more often in the summer.

"Anything you eat, drink, wear or drive has come up on our ships," says George Lowery, Alaska director for Totem Ocean Trailer Express Inc., or TOTE, which carries cargo for Wal-Mart and Fred Meyer among others.

No one disputes that Alaska's biggest port needs an overhaul. The Port of Anchorage began operations in 1961. Some of it was weakened in the 1964 earthquake. The old pilings are corroding, and maintaining them is expensive at more than \$1 million a year.

"We're not against expansion," said Julie Jessal, president of the Government Hill Community Council, where residents have the town's best view of the seaport. "But let's be thinking smartly about it instead of building things that are unnecessary."

The scene from Government Hill will change dramatically, starting with construction that may stretch past 2013. More than that, residents worry about how all that new land might be used. What if dusty coal ends up stored there, or something else equally noxious? Jessal asked.

She and other critics say they don't see the need for the huge project and question whether the port is overbuilding.

The community council pushed the port to specify who will use the new space. "Is there a huge industry that we are anticipating?" Jessal said. "A huge population increase?"

The port's short answer: No.

According to a 2006 report by the port, the four main berths are in use only about half the time.

Maybe cruise ships will come, Sheffield says. Maybe more container ships direct from Asia. Maybe vessels hauling materials for a natural gas pipeline. One company plans to build two new silos for storing cement. Nothing else is firm.

Port officials point to a trend of steady growth in port traffic and current conflicts between those who dock there. In the summer, for instance, unloading the cement ship can take weeks because it must wait for dry weather. The port is already operating "at or above sustainable practical capacity," port documents insist.

Anchorage Mayor Mark Begich said he reviewed the project closely after taking office in 2003 to make sure it wasn't being "oversized." He said he became convinced it's needed to replace the deteriorating old port and build for the future. And, he noted, it's being done in phases over many years.

"It is really not just Anchorage's port. It's Alaska's port," the mayor said.

The real need is for more land for operations, especially for cargo handling and staging areas for the military, the port said in a September 2006 report to the U.S. Army Corps of Engineers.

Not so, said Bob Shavelson, executive director of the watchdog group Cook Inletkeeper. All the talk about homeland security is just a smokescreen to rationalize what's happening, he said. "You see an effort to wrap this in a national security blanket."

It's true that more goods are arriving in Anchorage. In the last 15 years, new hotels have sprung up along with big stores like Barnes and Noble, all stocked with goods shipped from Outside, said Ken Privratsky, general manager in Alaska of Horizon Lines, one of two main cargo shippers in Anchorage. And two Target stores are coming to town with another opening in the Valley.

Yet even shippers aren't united.

Horizon Lines unloads its ships with cranes and supports a bigger port with bigger cranes for bigger ships loaded with more cargo, Privratsky said.

"We would double our capacity, generally," he said.

TOTE, with ships just a few years old that dock in Anchorage, doesn't use cranes. Cargo rolls off its ships on semi-trailers.

"We'd fit into the neutral category. This isn't something we had pushed for or asked to be done," Lowery said.

At any rate, total tonnage shipped through the Port of Anchorage is down from a peak in 2005. That's just because Flint Hills Resources Alaska in North Pole quit making a petroleum product used in goods like plastics that used to be exported on tankers, Sheffield said.

MORPHING MEGAPORT

The numbers are remarkable:

Total new land being created in Knik Arm: 135 acres.

Gravel and sand for fill: 11 million cubic yards.

Height of dock, from bottom of sea: Eight stories at the tallest.

Length of steel wall: 1.5 miles.

Before Sheffield became director in 2001, the port was working toward a smaller and more conventional expansion. In 2002, Tryck Nyman Hayes, the engineers who submitted an early design, estimated it would cost \$80 million to \$100 million. The oldest part of the dock and broken pilings would have been replaced with a new deep draft dock; a small area of tidelands would have been filled in.

Then-Mayor George Wuerch put Sheffield in charge.

"They just kind of scrapped the whole deal and decided they would mow over the whole port," said Richard Burg, who lost his job as port engineer in 2002 in a dispute over the megaproject. He said he wouldn't sign off on it because he didn't see the need.

Sheffield fell in love with a design patented by PND Engineers Inc. It uses sheets of steel to create horseshoe-shaped compartments filled with gravel. They call it "open cell sheet pile."

Sheffield says that design is one-third the price, less subject to corrosion and easier to maintain than a traditional dock the same size.

Asked for evidence the gravel-filled honeycomb costs less than a dock on pilings, port officials pointed to an analysis by PND, which has millions at stake, as well as an estimate by another firm.

But the estimates are fluid. PND's more recent figures show its design can be built for about half the price of a traditional dock -- plus or minus 25 percent.

The National Marine Fisheries Service says the port never did a true comparison of costs.

In June 2003, the price was estimated at \$227 million; by August 2004, \$300 million; by May 2007, \$375 million.

"Right now we're using \$526 million, but it will rise," Sheffield told the Anchorage Assembly in January.

In fact, this month, Begich's office began calling it a \$700 million project, just to be on the safe side.

The cost of steel and asphalt have gone up dramatically, and a slew of other factors contribute to the escalating bill, including a year delay in the project while waiting for the key permit, and whale monitoring that must continue a year after construction ends, project managers say.

Wuerch, the former mayor, now heads the controversial Knik Arm Bridge and Toll Authority, another proposed megaproject in the neighborhood. An access road to the bridge, if it's ever built, could go across the backside of the port, Sheffield said.

When bids were sought for the port design, project managers only were interested in the "open cell sheet pile" approach. PND, which has patented the design Sheffield wanted, was the lone bidder.

And the once-modest project morphed into a whole new port.

WHAT ABOUT THE SALMON?

Three federal agencies -- the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency -- opposed the design.

They pushed the port to consider a dock partially on pilings to allow easier fish passage and to fill in less land. The project as is violates the Clean Water Act, they said.

Port officials didn't budge.

Biologists worry the project may hurt beluga whales and salmon from Ship Creek and Mat-Su streams.

Knik Arm may look muddy and undesirable for fish, but recent studies found that salmon hang out there nearly all summer long before heading to sea, said Ann Rappoport, field supervisor for the U.S. Fish and Wildlife Service in Anchorage.

With the new port, shallow resting places for juvenile salmon will be replaced by a wall of steel in deep water. Urban anglers going after hatchery kings and silvers in Ship Creek may find fewer fish. Wild salmon from the Mat-Su could have trouble migrating, too.

"What the project is doing is filling in the last remnants of the Ship Creek estuary," said fisheries biologist Brian Lance of the National Marine Fisheries Service.

Beyond that, noise from port construction could threaten the declining population of Cook Inlet beluga whales, biologists say. Belugas also will lose valuable habitat near shore.

The federal Maritime Administration, known as Marad, is guiding the project through the bureaucracy. Marad, with a mission of promoting maritime commerce, had never overseen a port expansion before but is cutting through bureaucracy to get the Anchorage project through quickly, Sheffield said. It decided the project didn't need a comprehensive environmental review and issued a "finding of no significant impact" in 2005.

The Army Corps of Engineers came to the same conclusion last year. In August, the corps signed off on the project, issuing the key permit that allows it to fill in tidal lands.

"The port project is large, controversial and will have substantial environmental impacts that have not received adequate attention," Robert Mecum, acting administrator for the National Marine Fisheries Service in Alaska, wrote to the corps in response to that decision.

The port's already in an industrial area, not prime habitat, port managers say. It is dredged from May to November, according to the corps, which oversees that work. Fish and whales are being taken into account. Pile driving work must stop if whale watchers spot belugas close by. Noisy work will ramp up slowly each day to give whales time to clear out. The dock was redesigned to provide rocky recesses where fish can rest between stretches of steel, an amenity biologists scoff at and that geotechnical engineers worry may weaken the structure.

The port also agreed to spend \$8 million on "mitigation" projects still being worked out.

Biologists say that won't replace what's being lost.

IN THE EARTHQUAKE ZONE

Engineers and federal agencies raised concerns about the new structure's stability in a big earthquake.

Could the sheets of metal unzip? Would the dock collapse? If the steel ruptures, will gravel pour into Cook Inlet?

Engineers on the city's Geotechnical Advisory Commission have repeatedly called for the project design to be reviewed by an independent panel of experts.

"We're pushing the technology here," said Mark Musial, a geotechnical engineer with Golder Associates and commission member.

Most West Coast ports have traditional docks at least in part.

The Anchorage port design is "aggressive and unprecedented," concluded a December 2006 report by the U.S. Army Corps Engineer Research and Development Center in Vicksburg, Miss.

There's never been a dock of this design this big, the port acknowledged.

The center is building a \$1.4 million model of Knik Arm and the new dock. It will fill half a warehouse. Engineers are trying to simulate the extreme tides, currents and increasing sedimentation in Cook Inlet to evaluate what effect the structure will have, said Steve Boardman, chief of the civil project management branch for the corps in Alaska.

Contractors and port officials say they have layers of engineering and independent reviews to ensure the structure's safety. "And we're not done yet," Sheffield says.

PND's gravel-filled U-shaped design has been used since 1981 in Alaska with great success, said Dennis Nottingham, PND president.

"We've built 162 of these structures. They've been through thousands of earthquakes," he said.

The steel cells won't rupture because they are interlocked, and further strengthened by concrete crossbeams, said Diana Carlson, of Integrated Concepts & Research Corp., which is managing the project for Marad.

Pilings will be used to give extra support under the cranes. And the project will include a section able to withstand earthquakes as severe as the one in 1964, according to managers.

BIG MONEY

So where are the big bucks to build the megaport coming from?

Federal earmarks secured by Young and Stevens since 2002 amount to \$109 million, as of late February, Sheffield said. Another \$17.5 million so far has come from port revenues. The port plans to finance \$75 million with short-term debt that will be converted to long-term bonds.

Jim Lexo, chief executive officer of project manager Integrated Concepts & Research Corp., worked as an aide to Young until 1983 and managed his first five campaigns. He said he has never talked to Young about the port earmarks.

"That's something Gov. Sheffield manages all by himself," Lexo said.

Another half billion could still be needed. Young said the federal dollars will keep coming for the port.

"The earmarks are not going to go away, regardless of what you read in the paper," Young promised in a February press conference.

In the end, Sheffield said he expects the feds will pay for more than half the project. Begich wants \$100 million from the state over five years. There's \$10 million in the supplemental budget now being debated in Juneau.

Asked if city taxpayers would be tapped, the mayor said "not on my watch."

Neighbors are skeptical. "We may have a port ... that cannot financially support itself," said Jessal, the Government Hill Community Council president. "That's something that people far beyond our neighborhood should be concerned about."

Shavelson, of Cook Inletkeeper, has renamed the port the "Pork of Anchorage."

"It's potentially the biggest federal boondoggle in the state," he said.

Critics don't dissuade Sheffield.

"When people say it's the biggest federal boondoggle, I don't know why they say that. Maybe they beat their dogs, too," he said.

This state was built on people thinking big, he says.

"Nobody's getting rich here," Sheffield said. "We're just working to try to make it better for Alaska."

Find Lisa Demer online at adn.com/contact/ldemer or call 257-4390.

EXPANSION: For more on the port project, see

www.portofanchorage.org

READ AND DISCUSS: Find a comprehensive overview of the project, including construction schedule and highlights, and sound off on whether you think the expanded port is necessary.

adn.com/anchorage

By the numbers

135 ACRES

New land being created in Knik Arm. About 3.5 times the size of the Dimond Center including its parking lots.

1.5 MILES

Length of dock when complete, the distance from the tower at Merrill Field to the 5th Avenue Mall downtown.

11 MILLION CUBIC YARDS

Amount of gravel and sand needed for fill. Around 300,000 70-ton truckloads.