US Army Corps
of Engineers
Alaska District

ANCHORAGE
Regulatory Division (1145)
CEPOA-RD
Post Office Box 6898
JBER, Alaska 99506-0898

Public Notice of Application for Permit

PUBLIC NOTICE DATE:	**February 21, 2018**
EXPIRATION DATE:	**March 23, 2018**
REFERENCE NUMBER:	**POA-2003-502-M11**
WATERWAY:	**Knik Arm**

Interested parties are hereby notified that a Department of the Army (DA) permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the Public Notice reference number listed above.

All comments should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact Ms. Amanda Heath at (907) 753-5582, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at Amanda.L.Heath@usace.army.mil if further information is desired concerning this notice.

APPLICANT: Municipality of Anchorage, Port of Alaska; POC: Mr. Stephen Ribuffo; 2000 Anchorage Port Road, Anchorage, Alaska 99501; Phone: (907) 343-6201; Email: RibuffoS@muni.org.

AGENT: HDR, Inc.; POC: Mr. Dave Casey; 2525 C Street, Anchorage, Alaska 99501; Phone: (907) 644-2191; Email: Dave.Casey@hdrinc.com.

LOCATION: The project site is located within Section 7, T. 13 N., R. 3 W., Seward Meridian; USGS Quad Map Anchorage A-8; Latitude 61.23350º N., Longitude 149.98507º W.; in Anchorage, Alaska.

PURPOSE: The applicant's stated purpose is to construct the Petroleum and Cement Terminal (PCT) to replace the existing Petroleum Oil and Lubricants Terminal (POL) 1 terminal with a new structure that exceeds current seismic standards.

PROPOSED WORK: The Municipality of Anchorage through its Port of Alaska Department (Port) proposes to construct the PCT project during 2018 and 2019. The Port's permit application seeks two DA permits, one for each year.

The Port's 2018 Work Plan includes:

A. Transitional Dredging and Disposal. To allow vessels to access and dock, achieve seismic requirements, and provide construction access in 2019, 680,000 cubic yards (CY) of material would be dredged from the transitional dredging area in 2018. The dredge depth at the platform face would be to -40 feet mean lower low water (MLLW) (with a maximum depth of -43 feet MLLW to account of over dredging with a clam shell dredge). From the platform landward (foreslope), the depth would vary due to the existing grade but follow a 5:1 slope. Finally, a construction access slip centered on the PCT trestle to allow marine access to nearshore waters would be dredged. Dredged material would be placed on a scowl or barge, transported to the U.S. Army Corps of Engineers (USACE) Anchorage Harbor open water disposal area and discharged.

B. Landside Utilities. New utility lines would extend from the PCT to connection points with existing landside infrastructure. These would include water, power, and communication lines; as well as petroleum pipelines and a cement-carrying pipeline (product lines). Installation of the utility lines would involve the excavation material which would be sidecast and, to the extent possible, used as backfill after the placement of the utilities. It would be the responsibility of the contractor to dispose any excess overburden material left over after backfilling the utility trenches at a site permitted by the DA or at a site outside of the DA's authority.

C. Soil Improvements for PCT Trestle. To properly stabilize the area where the PCT trestle meets the shoreline (abutment) and ensure the project meets seismic requirements, soil improvements are necessary. Soil improvements would consist of in-situ mixing of soil with concrete to a depth of approximately 50 feet below grade. To allow access to the area for this work, a temporary work pad would be constructed. Construction of the pad would include the placement of approximately 14,800 CY of fill below the high tide line (HTL; 34.7 feet MLLW; approximately 10,100 CY below MHW). This fill would be removed at the end of the 2018 construction season.

D. Drill Casing Removal. Two drill casings were left in-situ when they broke beneath the existing mudline during summer 2017 geotechnical investigations (initially authorized on May 24, 2017, and subsequently amended on July 28, 2017, under Nationwide Permit No. 6, file number POA-2003-502, Knik Arm). One of these casings, RM17-05, would be removed to a depth of -55 feet MLLW. The other casing, RM17-06, was cut off at a depth of -66 feet MLLW and would be left in place.

The Port's 2019 Work Plan includes:
Installing the PCT platform and main trestle, the emergency trestle, and relocating the South Floating Dock. Additionally, any remaining work on landside utilities and product lines would be completed in 2019. A total of 257 piles (213 permanent and 44 temporary) would be

installed below the HTL for construction of the PCT. The number of piles for each PCT component is provided in Table 1. Final design and construction would be performed, and while the general design elements presented here are expected to remain, pile numbers may change in the future. The Port would communicate any relevant design changes to USACE, and would apply for permit modifications if necessary. The specific components include:

Table 1. PCT Pile Specifications

Pile Type	Quantity	Outside Diameter (inches)	Approximate Area of Impact (square feet)
Main Trestle/Platform Piles	72	48	907
Emergency Trestle Piles	15	48	189
Mooring Dolphin Piles	48	48	605
Breasting Dolphin Piles	40	48	504
Fender Piles	28	36	199
South Floating Dock Piles	10	24	31
Temporary Piles	44	H-Piles (12" x 16")	704

A. PCT Platform and Main Trestle. The PCT would be a pile-supported platform and trestle structure located above and below the HTL and MHW mark (34.7 feet and 28.4 feet, respectively from 0.00 feet MLLW) of Knik Arm sited at the southernmost shoreline of the Port. It would include both breasting and mooring dolphins to receive and secure ships while in port. The platform would have a finished elevation of 40 feet MLLW. The supporting piles would be designed for a 75-year lifespan, minimizing the need for future maintenance and replacement projects. The platform structure would be designed to meet or exceed seismic stability standards for resiliency in the event of a large earthquake. The platform structure would be accessed by the main trestle, which would attach to shore at an elevation of 35 feet MLLW. The platform and main trestle would be supported by 72, 48-inch diameter piles ranging in length between approximately 130 feet and 150 feet. Additionally, a second set of piles would be constructed immediately south of the main trestle to support the installation of an emergency trestle. If the main trestle is damaged in an earthquake or other event, the emergency trestle would be placed on these 15, 48-inch diameter piles, allowing for access to and use of the PCT platform until the main trestle can be repaired.

Another innovation incorporated into the PCT design is the use of concrete and steel composite piles to support the main trestle and platform structure. Installation of these hybrid piles would consist of driving a hollow, 48-inch-diameter steel pile and subsequently filling it with reinforced concrete to a level below the mudline. Above the mudline, the steel pile would be cut off at an elevation between 23 feet MLLW and 33 feet MLLW, which would allow the composite pile to absorb forces that would be impeded by the presence of the steel sheath. The steel pile would be structurally sacrificial, and the full strength of the pile would be provided by the reinforced concrete

core. Each composite pile would be topped with a reinforced concrete cap, on which the main trestle or platform will sit.

Five breasting dolphins would be constructed parallel to the PCT platform face (three dolphins north of the main platform, and two to the south) and at an elevation of 40 feet MLLW. Each of these dolphins would be supported by eight 261-foot long, 48-inch in diameter battered hollow steel piles driven to a depth of approximately -225 feet MLLW. Additionally, 28 fender piles, approximately 70 feet long and 36 inches in diameter, would be installed on the docking faces of the breasting dolphins, driven to an approximate depth of -65 feet MLLW.

Six mooring dolphins would be constructed parallel to and landward of the platform face and breasting dolphins and at an elevation of 40 feet MLLW. These would provide additional secure mooring points for ships docking at the PCT. Each mooring dolphin would be supported by eight 206-foot long, 48-inch diameter battered hollow steel piles driven to a depth of approximately 170 feet MLLW.

The breasting and mooring dolphins would be connected to each other and the PCT platform by a series of open-steel grate catwalks. These catwalks would be approximately 3 feet wide and supported by high strength steel beams (no additional piles will be installed between dolphins). The bottom elevation of the catwalk's structure will be 40 feet MLLW. A total of 910 feet of catwalk would connect the dolphins to the platform.

B. Emergency Trestle. The PCT would also include construction of a set of secondary piles located parallel to and immediately south of the main trestle, which would allow for a temporary emergency trestle to be installed if the main trestle is damaged in a major earthquake. Much of the PCT's earthquake resiliency is provided by the ability of the above-mudline segments of the piles to flex and absorb shaking. Since the piles of the main trestle are in shallow water relative to those of the platform, more of their length is below the mudline, which limits their ability to flex and absorb the energy of a strong earthquake. To meet the need for providing an earthquake-resilient port, the secondary piles and emergency trestle would provide redundant access to the PCT platform in the case of main trestle failure. Fifteen 48-inch diameter steel pipe piles would be placed in sets of three for the emergency trestle, with a steel cap on top of each set. This would allow for the temporary emergency trestle, which would be stored on-site, to be quickly installed on the piles in an emergency. Temporary utility lines, including water, power, communication and product pipelines, would be installed with the emergency trestle.

C. South Floating Dock. To accommodate construction of the PCT, the South Floating Dock would be relocated from its existing location immediately south of the existing Petroleum Oil and Lubricants Terminal 2 (POL 2), to a location south of the new PCT. Depending on their condition and compliance with current design standards, the existing trusses, gangways, and pile caps would be relocated to the new site. The support and float guide piles would not be reused, and would be cut off at the mudline. A total of ten new 24-inch diameter hollow piles (four support piles and six float guide piles) would be installed to facilitate placement of the dock at its new location.

D. Construction Methods and Temporary Piles. Installation of the hybrid piles would begin with driving hollow steel piles using impact-driving methods, likely from an anchored barge. Vibratory pile installation methods would not be used for permanent pile installation. Once the main trestle piles are driven into place, an air pump would likely be used to remove substrate from inside the piles to a depth of approximately 15 to 30 feet below the mudline. The removed substrate material, totaling approximately 1,500 cubic yards, would be immediately discharged and allowed to fall around the pile and be distributed by currents. Once the substrate material is removed, the piles would be backfilled and capped with concrete.

   During construction of the PCT, temporary piles would be used to anchor the template that would guide the installation of battered piles at each of the 11 dolphin locations. It is anticipated that temporary piles would be 12- by 16-inches, and 130 feet in height, and would be installed 20 to 40 feet into the substrate. Four temporary piles would be needed per mooring and breasting dolphin, for a total of 44 temporary piles. Temporary piles would be installed and removed using vibratory methods.

ADDITIONAL INFORMATION: A Public Notice for a permit application for the PCT was originally issued on March 17, 2017. The applicant requested the permit application be withdrawn to redesign the proposed project. A new permit application for the PCT was received by the Corps on February 5, 2018. The PCT is part of the first phase of a suite of construction projects proposed as the Port of Alaska Modernization Program (PAMP), which is intended to address the deteriorating conditions of the Port's marine facilities and enable safe, reliable, and cost-effective port operations. The Port has identified the PCT as a priority for the PAMP, due to the need to have a reliable terminal for moving goods into Alaska. PCT construction would occur during the ice-free months of 2018 and 2019.

2018 Work Plan: Transitional Dredging – Dredging the foreslope area would provide a stable transition zone between the South Backlands Stabilization Project and the PCT, which is important for earthquake resiliency. If an earthquake were to occur during winter, when ice conditions in Knik Arm often do not allow for dredging, sluffing could block ship access to the PCT and prevent it from being operational for longer than the seven-day design threshold.

The Port applied for a DA Section 10/404 permit on March 6, 2017, and a Section 408 permission on February 24, 2017 (revision 2), to construct the PCT Project. On March 17, 2017, the Alaska District issued a joint Section 10/404 and Section 408 public notice for the project to solicit public comment.

The Port has also received Section 10/404 authorization under nationwide permit (NWP), #6 Survey Activities to conduct geotechnical investigations to support the design of the PCT. Verification of authorization under the NWP was initially issued on May 24, 2017, and amended on July 28, 2017, under file number POA-2003-502.

The Port would use NWP 6 again in 2018 to collect soil samples to help inform the design of the cement needed for the soil improvements for the PCT trestle abutment.

See the enclosed Permit Application for a complete project description.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: The applicant has stated that, "placement of fill into Cook Inlet is required to meet the project purpose; therefore, avoiding the discharge of fill is not practicable."

b. Minimization: The applicant has stated that, "efforts were made during the project design to limit placement of fill to the amount necessary to construct the PCT. The pile-supported platform and trestle design was chosen instead of extending the current shoreline, which would require the placement of large amounts of fill to bring the area up to a usable grade. The number of piles was limited to that necessary for the structural integrity and earthquake resiliency of the project components. Additionally, the catwalk design utilizes high-strength steel beams instead of additional piles for support.

To the extent practicable, the temporary work pad would be constructed when the area is dewatered to minimize any incidental loss of fill to the marine environment."

c. Compensatory Mitigation: The applicant has stated that, "the placement of fill has been minimized to the quantity necessary to construct a stable and earthquake resilient PCT, and is limited to the immediate area of the piles. Due to minimization efforts and small footprint of the project, no compensatory mitigation is proposed."

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no cultural resources in the permit area or within the vicinity of the permit area. The permit area has been determined to be the footprint of the proposed project within the waters of the U.S. Consultation of the AHRS constitutes the extent of cultural resource investigations by the Corps of Engineers (Corps) at this time, and we are otherwise unaware of the presence of such resources. The Corps has made a No Potential to Cause Effects determination for the proposed project. Consultation with the State Historic Preservation Office (SHPO) is not required, however, any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known or historic range of the Cook Inlet Beluga Whale (*Delphinapterus leucas*). We have determined the described activity may affect the Cook Inlet Beluga Whale. We will initiate the appropriate consultation procedures under section 7 of the Endangered Species Act with the National Marine Fisheries Service (NMFS). Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within the known range of the Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), coho (*O. kisutch*), sockeye (*O. nerka*) and pink salmon (*O. gorbuscha*). Eulachon (*Thaleichthys pacificus*) and low numbers of Pacific cod (*Gadus macrocephalus*), walleye pollock (*Theragra chalcogramma*), Pacific herring (*Clupea pallasii*); and longfin smelt (*Spirinchus thaleichthys*) and Pacific staghorn (*Leptocottus armatusspecies*) have also been captured in upper Cook Inlet. While these species are managed by the Fishery Management Plan for groundfish of the Gulf of Alaska, waters in the vicinity of the Port are not identified as EFH for these species.

We have determined the described activity may adversely affect EFH in the project area for five species of Pacific salmon: Chinook, chum, Coho, sockeye, and pink salmon. This Public Notice initiates EFH consultation with the NMFS. Any comments or recommendations they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a

permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(l) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States – Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

BILL WALKER, GOVERNOR

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

ANCHORAGE
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WQM/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501-2617
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NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. **POA-2003-502-M11, Knik Arm**, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.