



US Army Corps  
of Engineers  
Alaska District

# Public Notice of Application for Permit

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

<b>PUBLIC NOTICE DATE:</b>	<b>July 25, 2017</b>
<b>EXPIRATION DATE:</b>	<b>August 24, 2017</b>
<b>REFERENCE NUMBER:</b>	<b>POA-2017-383</b>
<b>WATERWAY:</b>	<b>Beaufort Sea</b>

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

Comments on the described work, with the reference number, 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 Mr. Steve Moore by email at [stephen.a.moore2@usace.army.mil](mailto:stephen.a.moore2@usace.army.mil), by phone at (907) 753-5713, toll free from within Alaska at (800) 478-2712, or by fax at (907) 753-5567 if you have questions or need further information concerning this public notice.

**APPLICANT:** BP Exploration (Alaska) Inc. (BPXA), Post Office Box 196612, Anchorage, Alaska 99519-6612. The applicant's contact person is Pauline Ruddy, Land Use Permitting and Compliance Advisor, e-mail address: [Pauline.Ruddy@bp.com](mailto:Pauline.Ruddy@bp.com), fax number: (907) 561-5111, direct telephone line: (907) 564-5328.

**PROJECT NAME:** West Dock Causeway (WDC) Maintenance Dredging.

**LOCATION:** The project is located at the existing West Dock Causeway, Latitude 70.38702, Longitude - 148.51575, Umiat Meridian, T12N, R14E, S11,14, and 23, in the Prudhoe Bay unit west of Deadhorse, Alaska.

**PURPOSE:** To provide continued dredging of seafloor sediments around the WDC for the purpose of maintaining navigational access to DH2 and DH3, and to insure the continued intake of seawater to the existing Seawater Treatment Plant (STP) intake, as previously authorized under multiple US Army Corps of Engineers, Alaska District (USACE) permits including:

USACE 740221BS-10 dated July 15, 1974; M-740221BS-10 dated January 8, 1976; NPACO-071-OYD-2-790291 dated March 18, 1980; 2-820177 BS300 dated March 10, 1982; 071-OYD-2-790291 dated June 25, 1982; and POA-1979-291-OO dated March 1, 2008.

### PROPOSED WORK:

- Maintenance dredging to the previously permitted design depth of -9.0 feet (ft) (relative to Mean Lower Low Water (MLLW) Datum, which is the vertical datum for all elevations cited herein) at dockhead 3 (DH3) and in the approach channel to DH3.
- Maintenance dredging to the previously permitted design depth of -7.8 ft at dockhead 2 (DH2) and in the approach channel from DH3 to DH2.
- Maintenance dredging to the previously permitted design depth of -9.0 ft in the region south and southwest of the STP seawater intake (including the region typically occupied by the ice channel to the STP intake).
- Continued placement of WDC dredged (fill) material on the WDC side slopes at the locations identified in the USACE POA-2016-00441 permit.
- Regrading and shaping of the gravel surfaces of DH2 and DH3 to match the deck heights of arriving barges.
- Regrading of the two ramps on DH2 to facilitate hovercraft access and egress as well as barge removal and re-launching.
- Installation of floats and moorings on the south side of the STP during the open water season for use by oil spill response vessels.
- Installation of buoys for anchor moorings on the east and west side of the causeway to accommodate oil spill response vessel staging.
- Installation of buoys at the 650-ft Breach during the open-water season to warn vessels to remain clear of the breach.

A summary of the previously-approved design depths at the three proposed dredge sites along with the estimated sediment volumes that would result if these sites were dredged to those depths are included in Table 1. Each volume includes a 20% contingency to cover uncertainties in the quantity estimates as well as interannual fluctuations in the conditions that drive sediment transport. Based on these quantities, as well as prior experience as the Operator of the WDC, BPXA requests approval to dredge a typical amount of 20,000 cubic yards (cy) per year from one or all (in total) at DH3 and its approach channel, DH2 and the approach channel from DH3 to DH2, and the vicinity of the STP seawater intake (Figures 2 through 10). It is anticipated that most barging activity will be focused on DH2; therefore, BPXA is requesting permission to dredge up to a maximum amount of 225,000 cy in any one calendar year.

All dredged material is placed as fill on the WDC as authorized under POA-2016-00441 for beach replenishment and erosion protection. No dredged material is placed off-shore or on any other upland area other than the WDC.

Historically, dredging typically has been limited to only one or two of the permitted areas per open-water season or year.

**Table 1. Proposed Design Depth and Maximum Dredging Quantities at the West Dock Causeway**

Parameter	Dockhead 3 & Approach*	Dockhead 2 & Approach*	STP Intake**	Total
Design Depth	9.0 ft	7.8 ft	9.0 ft	N/A
Dredge Quantity	257,000 CY	188,000 CY	31,000 CY	476,000 CY
20% Contingency	51,000 CY	38,000 CY	6,000 CY	95,000 CY
<b>Total Quantity</b>	<b>308,000 CY</b>	<b>226,000 CY</b>	<b>37,000 CY</b>	<b>571,000 CY</b>
<b>Sea Bottom Area</b>	<b>64.26 Acres</b>	<b>61.11 Acres</b>	<b>5.74 Acres</b>	<b>131.10 Acres</b>

Notes:

1. All volumes and areas were estimated from bathymetric data obtained in 2014 (most recent available).
2. Volumes within shoal areas near dock faces and STP sheetpile all were estimated in the absence of data.
3. Divisions between computational areas were taken at the toe of the channel.

The project is not expected to generate any significant quantities of waste materials. Any waste material generated as a result of these activities will be disposed of in an approved manner at existing sites and/or facilities. Solid wastes will be hauled off-site for disposal at the North Slope Borough landfill.

The foregoing scope of work does not constitute a substantive change from what has been undertaken in the past and what was previously authorized by the USACE under POA-1979-291-OO (and subsequent modifications and amendments). Additional information regarding specific activities is provided in the sections that follow.

**Maintenance Dredging**

The design water depth for DH3 and its approach channel (9.0 ft), is predicated on the need to accommodate vessels with drafts to 8.0 ft with one foot of underkeel clearance. The design water depth for DH2 and its approach channel (7.8 ft), is intended to accommodate vessels with drafts to 6.8 ft with one foot of underkeel clearance. The 9.0-ft design depth adjacent to the STP intake corresponds to the approximate depth at the base of the intake bay.

Vessel drafts, underkeel clearances, and dredging tolerances are included in the design depths proposed in this application (Table 1). Due to the high rates of shoaling that can occur in the vicinity of the WDC, overdredging and/or preemptive dredging well in advance of any vessel transit are not proposed. Dredging at the outset of a particular open-water season will occur only to the depth necessary to accommodate the vessels anticipated during that season. For example, if barges with a maximum draft of 5 ft are expected during the open water season, dredging would be limited to a depth of 6.0 ft (consisting of 5 ft for vessel draft and one foot for underkeel clearance). This approach will minimize the amount of dredging conducted at the outset of each open-water season.

The maintenance dredging at DH2, DH3, the dockhead approach channels, and the STP seawater intake will be performed using one or more of the five dredging techniques currently authorized under BPXA’s existing permit and summarized below:

1. *Hydraulic Excavator on Dock Surface:* An extended-reach hydraulic excavator working from the dock surface is used to excavate sediment to the desired water depth. The material is temporarily stockpiled on the dock surface before being loaded onto dump trucks and transported to one or more permitted areas on the side slopes of the WDC (Figures 3 through 7). Once the material has been unloaded, it is distributed and graded using conventional earth-moving equipment.
2. *Dragline Excavator on Dock Surface:* A conventional crane with a dragline bucket working from the dock surface is used to excavate sediment to the desired water depth. The material is temporarily stockpiled on the dock surface before being loaded onto dump trucks and transported to one or more permitted areas on the side slopes of the WDC (Figures 3 through 7). Once the material has been unloaded, it is distributed and graded using conventional earth-moving equipment.
3. *Hydraulic Excavator on Barge Deck:* In those instances when sediment must be removed from areas that lie beyond the reach of equipment operated on land, a hydraulic excavator operated on a barge deck may be used. The dredged material is barged to DH2 or DH3, and then handled in the manner described above under “*Hydraulic Excavator on Dock Surface*”.
4. *Hydraulic Excavator on Sea Ice:* In those instances when sediment must be removed from areas that lie beyond the reach of equipment operated on land, a hydraulic excavator operated on the sea ice may be used. The material is loaded onto dump trucks and transported to one or more permitted areas on the side slopes of the WDC (Figures 3 through 7). Once the material has been unloaded, it is distributed and graded using conventional earth-moving equipment. This form of winter dredging originally was permitted in modification POA-1979-291-M32, dated March 6, 2009.
5. *Screeding from Barge:* In those instances when a barge must be grounded on the sea bottom to allow one or more heavy objects to be transferred between the barge and the dock, the sea bottom must be smoothed to provide proper support for the barge. This smoothing is accomplished by screeding, which is conducted by dragging a beam across the sea bottom. The beam is mounted on a barge propelled by a tug, with the height of the beam set to the desired depth (Figures 3 through 6). This procedure causes sediment to be redistributed rather than removed from the sea bottom.

It is anticipated that dredging will be conducted during the open-water season (Activities 1, 2, 3, and 5 above), and will be completed in less than 20 working days in most years, and in less than 30 working days in years with high rates of shoaling. Similarly, it is anticipated that all winter dredging (Activity 4 above) will be completed in less than 20 working days in most years, and in less than 30 working days in years with high rates of shoaling. These estimates exclude weather downtime.

Dredging will suspend sediment from the seafloor and cause a temporary increase in turbidity. However, the relatively short duration and limited areal extent of the dredging activities will minimize the impact on both fish and benthic organisms that are well-adapted to frequent disturbance from agents that include summer coastal storms and winter ice gouging. Fish present in the West Dock area during the open-water season include Arctic and least cisco, broad whitefish, Dolly Varden, humpback whitefish, and several marine species. Fish are most

abundant in the West Dock region during July and August and therefore could encounter the aforementioned increase in turbidity. However, given the short duration and highly localized nature of the planned dredging activities, no significant impacts on fish movement are anticipated.

### **Placement of WDC Dredged Material**

It is anticipated that the gravel needed for replenishment of the WDC's sacrificial beaches will be derived from a combination of: 1) recycled dredge spoils obtained from DH2, DH3, and/or adjacent to the STP seawater intake; 2) recycled beach replenishment material that accumulates above Ordinary High Water (OHW) against the north side of the PM-2 Pad; and 3) permitted gravel sources. The recycled beach replenishment material is particularly advantageous, in that the fines already have been removed by prior exposure to waves. As a result, this material produces minimal turbidity when reintroduced into the water column.

Fine-grained dredge spoils consisting of clay, sand and silt are not ideal for beach replenishment. In consequence, they are placed above OHW on WDC in areas where they can drain without producing significant turbidity. This approach eliminates the possibility of introducing salt into the onshore tundra environment while providing additional bulk to the WDC side slopes. During extreme storm events, when the above-water side slopes are subject to erosion, the incremental turbidity contributed by erosion of the fine-grained sediments is inconsequential relative to the background level generated by wave-induced agitation of the sea bottom.

Specific placement sites for the dredged material within the permitted areas on the side slopes of the WDC will be determined in accordance with the needs identified during the annual monitoring program and as authorized by POA-2016-00441. No dredged material will be disposed of offshore or at upland locations without prior evaluation and authorization.

### **Sediment Testing**

As with the existing permit conditions of POA-1979-291-OO, dated March 1, 2008, prior to any dredging at the WDC, BPXA will sample potential dredge material and test for contaminants and grain size. At least three samples will be acquired in each of the areas in which dredging will be conducted (DH3 approach channel, DH3, DH2 approach channel, DH2, and STP intake). The samples will be tested for Benzene, Ethylbenzene, Toluene, Xylene (BETX), Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Residual Range Organics (RRO), Total Organic Carbon (TOC), and Total Metals (As, Cd, Cu, Pb, Hg, Ni, Ag, Zn).

Fine-grained sediments, with more than 50% passing the No. 200 sieve (United Soil Classification System), will be either screeded or dredged, as needed, to attain the desired depth. If dredging is found to be necessary, the excavated material will be stockpiled along the WDC road between the STP and the staging area. The sediment will be allowed to drain until most of the pore water has been eliminated, after which it will be placed in the areas approved for dredge material placement (as shown in Figures 3 through 7 of this application).

BPXA reports that none of the sediment samples obtained from 2003 through 2016 were found to violate the maximum permissible levels specified in Alaska Department of Environmental Conservation (ADEC) Method Two Migration to Groundwater Cleanup Levels (ADEC Table B1) and "Dredge Material Evaluation Framework, Lower Columbia River Management Area, November 1998, US Army Corps of Engineers". The sole exception occurred in the case of

arsenic, the levels of which BPXA states is a result of the high background levels present in the vicinity of Prudhoe Bay.

### **Regrading and Shaping of Gravel Surfaces of DH2 and DH3**

The top surfaces of DH2 and DH3 must be regraded and reshaped occasionally to accommodate cargo transfer to and from arriving barges. Of critical importance is to match the height of the dock surface with that of the barge deck. The work is accomplished using conventional earth-moving equipment and is conducted entirely above OHW.

The existing gravel ramps on the north and south sides of DH2 require periodic regrading both to facilitate hovercraft access, and to facilitate removing barges for inspection at the end of the open-water season and re-launching them at the beginning of the next open water season. Each ramp, which measures approximately 200 ft long by 100 ft wide, is regraded to remove discontinuities in the gravel surface using conventional earth-moving equipment working above OHW.

### **Annual Installation of Floats and Moorings**

At the beginning of the open-water season, prefabricated floats with one or more gangways and offshore moorings may be installed in the region immediately south of the STP for use by oil spill response vessels. The floats are attached to the stern of the STP barge and the flanking sheet pile walls. The moorings consist of buoys attached to clump weight anchors using rope and/or chain. All floats, gangways, and moorings are removed at the end of the open-water season.

When easterly winds prevail, the spill response vessels typically are moored on the west side of the WDC using grounded barges that are attached to the causeway with mooring lines and gangways (Figure 2). The barges are no longer used for cargo transport. When westerly winds prevail, the spill response vessels typically are moved to the east side of the causeway, where they are moored in the bight to the south of DH3 using bow lines to shore and stern anchors marked with buoys in the bight. The vessels typically occupy either the east or west mooring areas any time except during transition periods.

Continued seasonal use of a floating dock at various locations along the WDC is requested as necessary to support crew and cargo transfer activities that include (but are not limited to): seismic operations, crew boat operations, equipment loading and unloading, and spill response activities.

### **Annual Installation of Buoys at 650-ft Breach**

At the beginning of the open-water season, up to three buoys warning mariners to remain clear of the 650-ft Breach may be installed on each side of the Breach (up to six buoys total). Each buoy is secured to a clump weight anchor using chain and/or rope. All buoys, anchors, chain, and rope are removed at the end of the open-water season.

**ADDITIONAL INFORMATION:** The foregoing scope of work does not constitute a substantive change from what has been undertaken in the past and what was previously authorized under POA-1979-291-OO (and subsequent modifications and amendments). Similar dredging activities at WDC are currently authorized through January 31, 2018, via DOA permit POA-1979-291-OO.

**APPLICANT PROPOSED MITIGATION:** The applicant has provided the following mitigation statement regarding efforts to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material:

**Avoidance:** BPXA has reviewed options to avoid dredging adjacent to the West Dock Causeway at established barge access channels and loading areas. The causeway experiences sedimentation due to Beaufort Sea currents, storms, addition of sediment into the water column from area rivers and run-off. If continued maintenance dredging does not occur, the operability and initial purpose for the construction of the WDC may no longer be met and use of the causeway for barge and other vessel access may not be able to continue.

**Minimization:** The proposed maintenance dredging will be limited to an as-needed basis and limited to area and volumes necessary to accommodate vessels utilizing WDC. BPXA proposes to dredge approximately 20,000 cy of material annually, with a maximum not to exceed volume of 225,000 in a single year. The design depths reflect hull draft for large sea-lift operations. Historically only one or two locations annually requires some amount of dredging to accommodate more shallow draft barges. The requested volumes reflect the minimum dredging that may be necessary annually or to the current permitted design depth at DH2 and its approach. DH2 is the most utilized barge landing area as it is located landward of the WDC breach. The breach is spanned by a single lane bridge with size and weight restrictions, therefore impacting equipment and materials that could be transported from DH3. Dredging will only be conducted as necessary to maintain the continued utilization of WDC as previously permitted by the USACE.

**Compensatory Mitigation:** BPXA has avoided and minimized, to the extent practicable, impacts to waters of the US at West Dock Causeway. No other alternative is available to meet the stated purpose for the project and use of the West Dock Causeway. Additionally, this work has been previously permitted and ongoing since BPXA retained operatorship in 2000. No new or increased impacts to the environment from these activities are anticipated. Therefore, BPXA proposes that no compensatory mitigation be required for continued maintenance activities at West Dock Causeway.

**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 listed or eligible properties in the vicinity of the worksite. Consultation of the AHRs constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated via this public notice with the State Historic Preservation Office (SHPO). 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 spectacled eider (*Somateria fischeri*), Steller's eider (*Polysticta stelleri*), and polar bear (*Ursus maritimus*). We have preliminarily determined the proposed modification may affect, but is not likely to adversely affect, the above species, including designated or proposed critical habitat, under the ESA of 1973 (87 Stat. 844). 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 National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). We are currently gathering information regarding and have yet to make a determination of effect. Should we find that the described activity may affect the species listed above, we will follow the appropriate course of action under Section 305(b)(2) of the Magnuson-Stevens Act. Any comments the NMFS may have concerning essential fish habitat 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)(1) 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 USACE 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 fully considered by the USACE 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 received will be used in the preparation of our decision document for the proposed action. 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 modification will be issued or denied under the following authorities:

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).

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

District Commander  
U.S. Army, Corps of Engineers

Enclosures

# STATE OF ALASKA

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

## **ANCHORAGE**

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WQM/401 CERTIFICATION  
555 CORDOVA STREET  
ANCHORAGE, ALASKA 99501-2617  
PHONE: (907) 269-7564/FAX: (907) 334-2415

## **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 Number **POA-2017-383 Beaufort Sea** 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.