This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

APPLICANT: Diamond State Port Corporation, c/o Eugene Bailey
820 North French Street, Fourth Floor
Wilmington, Delaware 19801

AGENT: Richard M. Beringer
Duffield Associates, Incorporated
5400 Limestone Road
Wilmington, Delaware 19808

WATERWAY: Delaware River

LOCATION: Tax Parcels 0615300006 and 0615300003, located at 4600 Hay Road in the Edgemoor section of unincorporated New Castle County, Delaware. Latitude/Longitude: 39.74825° N / 75.496028° W (NAD 83).

ACTIVITY: The applicant, Diamond State Port Corporation (DSPC), seeks authorization from the U.S. Army Corps of Engineers under the authorities of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act to discharge fill material and to conduct dredging and disposal activities within, and adjacent to, navigable waters of the United States at the proposed Port of Wilmington Edgemoor Expansion project site.

The proposal is intended to support the expansion of the Port of Wilmington by re-developing the Edgemoor site into a multi-use containerized cargo port. To that end, the DSPC intends to re-purpose an existing industrial site at the location of the former Chemours manufacturing facility. The former owner ceased operations at the site in 2015, followed by de-commissioning and demolition of the manufacturing process equipment. DSPC has since demolished and removed the buildings which remained after decommissioning, in preparation for re-development of the property as a port.
The attached project plans associated with this application were prepared by Duffield Associates, Incorporated, dated October 2019, and titled: *Permit Plan, Port of Wilmington Edgemoor Expansion, Brandywine Hundred ~ New Castle County ~ Delaware*, seventeen Sheets.

**Dredging**

To make the proposed port facility available to deep draught container cargo vessels, the applicant proposes to conduct hydraulic dredging within the Delaware River. The dredging site is located adjacent to and north of the Delaware River federal navigation channel, in the southern portion of Reach B of the river, at the intersection of the Cherry Island and Bellevue Ranges. By conducting the dredging, the DSPC proposes to deepen portions of the Delaware River adjacent to the federal navigation channel in order to create a primary access channel intended to serve a ship berth to be located along the shoreline of the Edgemoor site. DSPC also proposes to create this berth by hydraulic dredging.

**Dredging of New Access Channel and New Ship Berth.** The dredging would create a new access channel between the existing Delaware River Federal Navigation Channel and the proposed Edgemoor ship berth site. The access channel would have a maintained depth of -45 feet mean lower low water datum (MLLW). The proposed access channel would terminate at the new ship berth, which would also be maintained by dredging to a corresponding depth of -45 MLLW.

**Volume of Dredged Material Generated.** The access channel and ship berth dredging activities would generate approximately 3,325,000 cubic yards (cy) of dredged material removed from the river. The material can be broken down into the following approximate volumes of sediments/materials (by texture): 915,000 cy (mud/silt); 925,000 cy (sands); 1,485,000 cy (clay and clayey sands). Following the initial dredging episode, it is anticipated that the access channel and berth site would require the maintenance removal of approximately 500,000 cy of accumulated sediment annually.

**Disposal of Dredged Material**

**On site beneficial re-use.** During the initial dredging episode, a portion of the dredged material would be pumped to the Edgemoor container port facility and there contained on uplands and de-watered in a single-use Confined Disposal Facility (CDF) constructed for the project until dried sufficiently for re-use. That material would represent approximately 10% of the total volume of material to be dredged, and would be limited to sediments removed from Stratum B, which are primarily sandy in texture. The applicant proposes to re-use these materials in a beneficial manner on upland portions of the site and as fill material landward of the proposed bulkhead.

**Corps Confined Disposal Facilities (CDFs).** In addition to the beneficial re-use described above, DSPC proposes to dispose of the remainder of the dredged material from initial construction at one or all of several active, Corps of Engineers-owned CDFs. The CDFs are known as Wilmington Harbor North, Wilmington Harbor South, Reedy Point North and Reedy Point South, each of which is located in Delaware downstream of the dredging site. The material generated by initial construction and all subsequent maintenance dredging would be removed from the dredging area by hydraulic dredge and transported via hydraulic pipeline to one or all of the Corps CDFs as available capacity allows.
Port Construction

**Wharf and Bulkhead.** The project includes the construction of an approximately 2600-foot long, pile-supported wharf and steel sheet pile retaining wall (bulkhead) along the landward side of the wharf structure. The bulkhead would be constructed largely within the river, below the elevation of mean high water. Imported granular fill would then be placed between the bulkhead and the elevation of mean high water (MHW) landward of the bulkhead. As mentioned above, a portion of the sandy textured dredged material would be placed on site and dewatered in a single-use CDF constructed for the project. After de-watering, some of that material would also be used as on-site fill for the bulkhead portion of the project. During discharge operations, the dredged material would be contained by the bulkhead on the riverfront side and by higher elevation uplands which surround the containment area. Construction of the bulkhead would necessitate the discharge of fill material into 239,580 square feet (5.5 acres) of the river below the high tide line. The proposed height of the fill behind the new bulkhead would be +18 feet NAVD88. The proposed elevated wharf structure would be built water-ward of the new bulkhead, and would be constructed of poured concrete, supported by 4,500 twenty-inch diameter steel pipe pilings filled with concrete. The wharf would be a high deck structure, with fendering along the river, and would be 325,000 square feet in size.

**Sedimentation Fans.** In addition, the applicant proposes to install a series of sedimentation fans along the riverfront face of the wharf. These fans are intended to reduce the volume of maintenance dredging associated with the project, and to maintain the functionality of the berths. The fans would be spaced every 200 feet along the wharf face (i.e., 13 fans). Each fan unit would be secured to the dock structure on a batter pile extending beneath the dock. In operation, water is drawn into the top of a 48-inch diameter “J-shaped” tube, passes through a hydraulically powered pump impellor, and is discharged as a jet along the bottom of the river. The hydraulic power is supplied by a land side structure which provides the hydraulic pressure to the fully submerged unit. The hydraulic fluid consists of a biodegradable vegetable oil suitable for water applications. The fans within the units are configured to rotate at speeds on the order of 275 revolutions per minute and provide a 4-inch screen at the larger intake end and an open space of 1.5 feet between the blades.

The sedimentation fans would operate during periods of tidal current (ebb and flood) and slowly rotate in a semicircle to direct the discharge jet in the direction of tidal current flow, thereby enhancing the velocity of the ebb and flood currents within the berth area. The run-time for each unit during a specific tide is approximately 30 minutes, during which time the unit completes 90 degrees of rotation. The units would operate four times per day; twice during the flood tide and twice during the ebb, but would be idle during slack water periods. The effective sedimentation prevention distance covered by each unit is anticipated to be approximately 160 feet channel-ward from the breasting line of the berth. Each fan would be secured by one 18-inch steel H Piling.

**PURPOSE:** The purpose of the project is to modernize the State of Delaware’s international waterborne trade capabilities by creating a navigable entrance channel and berthing area, and to construct a bulkhead and wharf associated with the development of a modern containerized cargo port.
Water Resources Development Act of 1986, Section 204(f). The DSPC has indicated its intention to make separate application to the Corps of Engineers, requesting that future maintenance dredging of the access channel be assumed by the Corps of Engineers as part of the federally authorized Philadelphia to the Sea Federal Navigation Project. Such action would be subject to a separate Corps review under Section 204(f) of the Water Resources Development Act of 1986. The anticipated 204(f) request is not a subject of this public notice.

Water Resources Development Act of 1996, Section 217(b). The DSPC has also indicated its intention to make separate application to the Corps of Engineers, requesting permission to dispose of most of the dredged material into the Corps-owned CDFs identified above. Such permission is required prior to use of the CDFs, and would be subject to a separate Corps review under Section 217(b) of the Water Resources Development Act of 1996, Section 217(b). The anticipated 217(b) request is not a subject of this public notice.

On April 10, 2008, the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency published a Final Rule on Compensatory Mitigation for the Losses of Aquatic Resources (33 CFR 325 and 332 and 40 CFR 230). The rule took effect on June 9, 2008. In accordance with 33 CFR Part 325.1(d)(7) of the rule, the applicant has stated that the proposed project has been designed to avoid and minimize adverse effects on the aquatic environment to the maximum extent practicable, and has further documented that compensatory mitigation is not necessary. The following aspects and features of the project demonstrate the applicant’s efforts in this regard.

The project cannot be avoided entirely because it is, by its nature, a water-dependent activity. The “no action” alternative would fail to meet the applicant’s stated purposes. Alternative sites, which were evaluated by the applicant, would have required more extensive dredging and/or greater impacts to tidal wetlands and other waters of the U.S. In-water structures have been designed to maintain water circulation and provide shelter for aquatic organisms to minimize and mitigate impacts to the shallow water environment. The volume of fill within waters has been minimized to the extent practicable while allowing the use of the site as a port facility.

The river sediments within the dredging area can be separated into three distinct strata based upon their physical characteristics and location. Stratum A is the shallowest of the sediment types and covers most of the dredging area. Stratum A represents the river bottom and is composed of soft, silty sediment deposits of varying thickness. The silt of Stratum A covers a layer consisting primarily of sandy sediments referred to as Stratum B. The fluvial sediments of Stratum B are underlain by apparently undisturbed clays and clayey sand typical of the Potomac geological formation, and referred to as Stratum C.

It should be noted that the river sediments to be dredged are known to be contaminated by harmful substances as follows:

Stratum A (fluvial silt) sediments have been evaluated using screening levels developed under the Delaware Hazardous Substances Cleanup Act, and contain Benzo[a]pyrene, PCB-126, total PCBs, TEQ dioxin, arsenic, and thallium at concentrations above human health screening levels.
Stratum B (fluvial sand) sediments contain PCBs, TEQ dioxin, arsenic, and thallium at concentrations above human health screening levels based on reported analytical testing results of samples.

Stratum C (Potomac Formation soils) sample analytical results were reported above the human health screening levels for arsenic and vanadium. Stratum C consists of previously undisturbed soils and assessment of environmental conditions associated with the adjacent former industrial site indicate that the arsenic and vanadium concentrations in the Potomac Formation soils do not result from releases of hazardous substances.

There do not appear to be risks to human health from short term exposure to these sediments during dredging and placement and drying of materials within the confined disposal facilities. However, removing contaminated sediments from the river as part of the project would provide a positive benefit to the local ecosystem as a result of the removal of potentially harmful organic substances and reductions in the concentration of inorganic substances. The removal of sediment from the project area would ultimately bring the sediment and water quality of the river closer to the long-term goal of protecting aquatic life.

The Delaware River shoreline at the project site is generally armored with a mix of retaining walls (bulkheads) and large stone (rip rap). The river is tidal at this location, and at low tide there is an exposed beach of sand and gravel water-ward of these armoring systems. There are no wetlands or submerged aquatic vegetation found at the site.

Bathymetric surveys indicate that a sub-tidal shelf extends water-ward from the low tide line to approximately 450 feet in the northern (upriver) portion of the site and approximately 550 feet in the southern portion. This shelf is characterized by gradually deepening water (slopes approximately 2%) to a depth of approximately -10 feet MLLW. Beyond this, and to the edge of the federal navigation channel, the river bottom becomes more steep, dropping approximately 35 feet across a horizontal distance of approximately 350 feet (10% slope) in the upriver portion of the site and 250 feet (14% slope) in the southern part.

Although the bathymetry of the project area would be permanently altered by the dredging and filling of this portion of the river, and the removal of the existing shallow water shelf, the project is expected to result in a net benefit to the aquatic environment as a result of the removal of hazardous substances within the sediments. Furthermore, based upon fish sampling analysis and fish stock assessments, this portion of the river was noted for its absence of resources suitable for fish spawning, breeding, feeding and growth, so that no habitat of value was identified within the project area. No difference between shallow and deep water with respect to benthic resources was identified.

In addition, the DSPC intends to conduct all of its dredging and disposal activities and all of its in-water construction work in the fall and winter seasons, thereby avoiding potential impacts to spawning fishes, and minimizing potential impacts to juvenile fishes.

Finally, the DSPC intends to install sedimentation fans along the face of the wharf structure in order to increase the period of time between maintenance dredging episodes and reduce the volume of material to be dredged on a maintenance basis.
Because the proposed activities would not cause the loss of wetlands or other special aquatic sites, the applicant has not proposed any compensatory mitigation.

A preliminary review of this application indicates that the proposed work may affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA) as amended. As a result, the Corps of Engineers anticipates consultation with the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the ESA. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires all federal agencies to consult with the NOAA Fisheries on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). A preliminary review of this application indicates that EFH is present within the project area. The Philadelphia District will evaluate the potential effects of the proposed actions on EFH and will consult with NOAA Fisheries if appropriate. Any necessary consultation would be concluded prior to the final decision on this permit application.

The USACE Cultural Resources Specialist is currently reviewing the proposed permit action for potential impacts to historic properties eligible for or listed on the National Register of Historic Places.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will 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, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer 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.
Comments on the proposed work should be submitted by email within 30 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District at: PhiladelphiaDistrictRegulatory@usace.army.mil.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

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

Additional information concerning this permit application may be obtained by calling John Brundage at (215) 656-6445, by email at PhiladelphiaDistrictRegulatory@usace.army.mil, or by writing to the above address.

The DSPC has made separate application to the Corps of Engineers, Engineering Division, to request approval under Section 14 of the Rivers and Harbors Act, and implementing regulations at 33 USC Section 408. The 408 request is also a subject of this public notice as described below.

PUBLIC NOTICE

REQUEST FOR PERMISSION TO ALTER A U.S. ARMY CORPS OF ENGINEERS PROJECT UNDER 33 USC 408 (Section 14 of the Rivers and Harbors Act of 1899; hereinafter Section 408)

TITLE: Diamond State Port Corporation – Wilmington Harbor Edgemoor Expansion

PUBLIC NOTICE IDENTIFICATION NUMBER: NAP-2019-00278-23

Interested parties are hereby notified that an application has been received for a Department of the Army Section 408 permission for certain work at or near a federal project of the United States, as described below and shown on attached figures. Written comments are being solicited from anyone having an interest in the requested alteration. Comments will become part of the U.S. Army Corps of Engineers’ (USACE’s) administrative record and will be considered in determining whether to approve the request. Comments supporting, opposing, or identifying concerns that should be considered by the USACE in its decision process are all welcome.
This public notice is not a paid advertisement and is for public information only. Issuance of this notice does not imply USACE endorsement of the project as described.

1. **REQUESTER:** In compliance with 33 USC 408 (Section 14 of the Rivers and Harbors Act of 1899; hereinafter Section 408), Diamond State Port Corporation has requested permission to have a section of their proposed ship turning basin to fall within the boundaries of the Main Navigation Channel of the Delaware River, Philadelphia to Sea Federal Navigation Project.

2. **LOCATION:** The proposed project is located in the Edgemoor section of unincorporated New Castle County, Delaware.

3. **LOCATION MAP(S)/DRAWING(S):** See attached Documents

4. **REQUESTER’S PROPOSED ACTION:** The Diamond State Port Corporation’s proposed project supports development of a new containerized cargo port in the Edgemoor section of unincorporated New Castle County, Delaware. Part of the proposed project has plans to use a section of the Main Navigation Channel of the Delaware River, Philadelphia to Sea Federal Navigation Project as a cargo ship turning basin. The proposed project also accounts for dredging of riverbed material to a depth of -45 feet mean lower low water (MLLW) datum to accommodate the creation of a new access channel from the existing Main Navigation Channel of the Delaware River, Philadelphia to Sea Federal Navigation Project to the proposed new ship berth. The Requester has proposed to place dredged material into existing USACE CDFs located in Delaware. Use of CDFs by the Requester will undergo review pursuant to Section 217(b) of the Water Resources Development Act of 1986. The anticipated 217(b) request is not a subject of this public notice.

5. **REGULATORY AUTHORITY:** This request will be reviewed according to the provisions of Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408). A requestor has the responsibility to acquire all other permissions or authorizations required by federal, state, and local laws or regulations, including any required permits from the USACE Regulatory Program under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403), Section 404 of the Clean Water Act (33 USC Section 1344) and/or Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 USC 1413). Any Section 10/404/103 permit decision associated with the proposed alteration is separate from and will not be included in the Section 408 permission decision. An approval under Section 408 does not grant any property rights or exclusive privileges nor does it authorize any injury to the property or rights of others.

6. **ENVIRONMENTAL COMPLIANCE:** A decision on a Section 408 request is a federal action, and therefore subject to the National Environmental Policy Act (NEPA) and other environmental compliance requirements. While ensuring compliance is the responsibility of USACE, the requester is providing all information that the Philadelphia District identifies as necessary to satisfy all applicable federal laws, executive orders, regulations, policies, and ordinances. This determination will be finalized following completion of agency coordination and prior to issuance of the Section 408 Permission Decision.

7. **EVALUATION:** As part of its evaluation, USACE will first make a determination that the submittal from the requestor is complete. The Philadelphia District is working closely with the
requestor to ensure that all required technical plans, maps, drawings, and specifications are provided and are complete. Once the package is complete, a District-led review will be conducted to determine, in accordance with Engineering Circular (EC) 1165-2-216, whether the proposed alteration will impair the usefulness of the USACE Project or be injurious to the public interest, as follows:

A. Impair the Usefulness of the Project Determination. The Philadelphia District’s Section 408 review team will determine if the proposed alteration will limit the ability of the federally authorized project to function as authorized, or will compromise or change any authorized project conditions, purposes or outputs.

B. Injurious to the Public Interest Determination. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Evaluation of the probable impacts that the proposed alteration to the USACE project may have on the public interest requires a careful weighing of all those factors that are relevant in each particular case. Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest.

8. SOLICITATION OF COMMENTS: 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 the proposed activity. Any comments received will be considered by USACE to determine whether to issue, modify, condition, or deny a permission for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are considered in making a final determination whether the proposed action will be categorically excluded from the need to prepare further NEPA documentation. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

A. It should be noted that materials submitted as part of the Section 408 request become part of the public record and are thus available to the general public under the procedures of the Freedom of Information Act (FOIA). Individuals may submit a written request to the Philadelphia District Corps of Engineers, Office of Counsel to obtain copies of said materials under the FOIA.

B. It is presumed that all parties viewing this notice will wish to respond to this public notice; therefore, a lack of response will be interpreted as meaning that there is no objection to the project as described.
9. COMMENT SUBMISSION AND ADDITIONAL INFORMATION: Written comments on the described work should reference the USACE Public Notice Identification Number found on the first page of this notice.

Comments or requests for additional information should be mailed or emailed to the following address:
Email: JuanCarlos.Corona@usace.army.mil
Mailing Address:
U.S. Army Corps of Engineers
Philadelphia District
ATTN: Juan Carlos Corona
7th Floor
100 Penn Square East
Philadelphia, PA 19107-3390