

HEARING OFFICER'S REPORT

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Department of Natural Resources and Environmental Control

FROM: Lisa A. Vest
Regulatory Specialist, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: Diamond State Port Corporation (“DSPC”) Wetlands and Subaqueous Lands Section (“WSLS”) Permit Application for a Subaqueous Lands Permit from the Division of Water and Federal Consistency Certification from the Division of Climate, Coastal and Energy’s Delaware Coastal Management Program (“DCMP”) for the DSPC’s proposal to construct a new container port on the Delaware River at DSPC’s Edgemoor property, located at 4600 Hay Road, Edgemoor, New Castle County, Delaware.

DATE: September 29, 2021

I. BACKGROUND AND PROCEDURAL HISTORY:

A joint virtual public hearing was held on Tuesday, September 29, 2020, at 6:00 p.m. via the State of Delaware Cisco WebEx Meeting Platform by the Department of Natural Resources and Environmental Control (“DNREC” or “Department”) to receive comment on the Division of Water, Wetlands and Subaqueous Lands Section (“WSLS”) permit application, and federal consistency certification from the Division of Climate, Coastal and Energy’s Delaware Coastal Management Program (“DCMP”) with respect to the United States Army Corps of Engineers (“USACE”) authorizations also required in this matter, of Diamond State Port Corporation (“DSPC” or “Applicant”). Both the WSLS permit application for a Subaqueous Lands Permit (“Application”) and the DCMP federal consistency certification (“Certification”) are currently pending before the Department at this time, necessitated by the Applicant’s proposal to construct a new container port on the Delaware River at DSPC’s Edgemoor property, located at 4600 Hay Road, Edgemoor, New Castle County, Delaware (“proposed project”).

The Applicant's property (tax parcels: 0615300006 and 0615300003) is the former location of the DuPont Edgemoor (Chemours) site, and its associated titanium dioxide pigment production facility. It lies along the Delaware River between Fox Point State Park ("FPSP") to the north, and industrial facilities to the south. The site operated as a titanium dioxide production facility through 2016, and has, historically, been regulated under the Delaware Hazardous Waste Program throughout its operations. That facility was demolished before the sale of the property to the Diamond State Port Corporation in February of 2017. The proposed project is located adjacent to and north of the federal navigation channel, in the southern portion of Reach B of the Delaware River, at the intersection of the Cherry Island and Bellevue Ranges, and is offshore of the Applicant's property, as described above.

The Applicant's proposed project includes building a pile-supported wharf (approximately 2,600 feet long), dredging the berth and access channel to a depth of 45 feet below mean lower low water, installing a bulkhead along 3,200 feet of shoreline and occupying approximately 5.5 acres of subaqueous lands. Additionally, the DSPC proposes to deepen portions of the Delaware River adjacent to the federal navigation channel to create a primary access channel that would serve the proposed berth construction at the site.

The majority of the dredged materials (approximately 3.3 million cubic yards of river sediments and underlying soil) will be stored in existing USACE-owned confined disposal facilities, with a portion retained onsite to be used as fill material. It should be noted that the use of shoaling fans (as proposed by DSPC in the original Application) was removed from the scope of the proposed activities after consultation with the Applicant.

It should also be noted that the portion of the Applicant's proposed project that fell under the permitting authority of the Department's Division of Waste and Hazardous Substances, Remediation Section ("DWHS-RS"), specifically, the implementation of corrective measures and post-closure care that would be authorized under a Resource Conservation and Recovery Act ("RCRA") Corrective Action Permit ("CAP"), was previously approved with the execution of DNREC Secretary's Order No. 2021-WH-0014, and the issuance by DNREC of a RCRA CAP Renewal Permit to the DSPC (Effective Date: April 29, 2021).

The Department processed all the above permit applications received from DSPC together regarding this proposed project, and held the public hearing on September 29, 2020, to assure both efficiency and transparency, and to make sure the public was afforded the ability to provide meaningful comment on the proposed project in its entirety, as noted above. With the RCRA CAP Renewal Permit having already been issued to DSPC, this Hearing Officer's Report concerns only the DSPC's WSLs Application and DCMP Certification that remain pending before the Department at this time.

The statutory and regulatory authority for the Department's review of the matters contained herein is established and provided for under 7 *Del.C.* Chapter 60, as well as *The Subaqueous Lands Act* (7 *Del.C.* Chapter 72), *The Regulations Governing the Use of Subaqueous Lands* (7 DE Admin. Code 7504), *Federal Consistency with Approved Coastal Management Programs* (15 CFR Part 930), and *Delaware Coastal Management Program Federal Consistency Policies and Procedures* (7 DE Admin. Code 2201).

Given the level of public interest on the Applicant's proposed activities regarding this proposed project, the Department made the decision to issue a Joint Public Notice on August 23, 2020, advising the public of the requisite permit applications and DCMP Certification submission received from DSPC, and of a joint virtual public hearing to be held by DNREC, as referenced above. Thereafter, the Department held the public hearing on September 29, 2020.

Department staff, representatives of DSPC, Duffield Associates (consultant for the Applicant), Gulftainer, and over fifty members of the public virtually attended the September 29, 2020 public hearing, with three members of the public providing live comment on the pending permit applications at that time. Due to the high level of public interest, and in response to requests made by the public for the Department to extend the public comment period, the hearing record ("Record") remained open for receipt of comment through December 1, 2020. It should be noted that comments were received from the public not only at the time of the public hearing, but also during both the pre- and post-hearing phases of this permitting matter. Proper notice of the hearing was provided as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The Record consists of the following documents:

(1) The official verbatim Transcript of Proceedings from Wilcox & Fetzer, Ltd., generated from the public hearing of September 29, 2020;

(2) Nine (9) exhibits submitted for the Record by the DNREC DWHS-RS, introduced by responsible Department staff at the aforementioned hearing, and expressly incorporated into the Record by this Hearing Officer at the time of the public hearing;

(3) Sixteen (16) exhibits submitted for the Record by the DNREC Division of Water, WSLs, introduced by responsible Department staff at the aforementioned hearing, and expressly incorporated into the Record by this Hearing Officer at the time of the public hearing;

(4) Seventeen (17) exhibits submitted for the Record by the DNREC Division of Climate, Coastal and Energy, DCMP, introduced by responsible Department staff at the aforementioned hearing, and expressly incorporated into the Record by this Hearing Officer at the time of the public hearing;

(5) PowerPoint submitted for the Record by Duffield Associates, on behalf of the Applicant, as introduced by Duffield Associates staff at the aforementioned hearing, and expressly incorporated into the Record by this Hearing Officer as “Applicant Exhibit 1” at the time of the public hearing;

(6) Approximately 200 written comments from members of the public, received by the Department both prior to and subsequent to the aforementioned public hearing, as posted on the hearing web page dedicated to this matter;

(7) Technical Response Memorandum (“TRM”) from the Department’s experts in the DWHS-RS including, but not limited to, Chris Brown, Hydrologist II, and Frank Gavas, dated March 17, 2021;

(8) Email of Chris Brown dated April 28, 2021, which provided the Finalized Statement of Basis and finalized RCRA CAP Renewal, as prepared by the Department’s experts in the DWHS-RS and provided to this Hearing Officer for inclusion into the Record developed in this matter;

(9) TRM from the Department’s experts in the WSLs and DCMP, including, but not limited to, John Cargill, Hydrologist IV, Division of Watershed Stewardship, Watershed Management Section; Katie Esposito, Environmental Scientist III, and Steven Smailer, Program Administrator, Division of Water, WSLs; and Laura Mensch, Program Manager, and Kimberly Cole, Program Administrator, Division of Climate, Coastal and Energy, DCMP, dated September 29, 2021;

(10) Memorandum from John Cargill, Hydrologist IV, Division of Watershed Stewardship, Watershed Assessment and Management Section, through Steven Smailer (expert in the Department’s WSLs, as previously identified above), dated September 26, 2021, regarding the Components of the State Compensatory Mitigation Plan for the DSPC’s proposed project.

(11) Finalized WSLs Subaqueous Lands Draft Permit, dated September 29, 2021; and

(12) Finalized DCMP Draft Certification, dated September 29, 2021.

The Department’s persons primarily responsible for reviewing the WSLs Application and DCMP Certification submitted by the Applicant (see DNREC staff identified in #9 above) developed the Record as it specifically relates to the WSLs and DCMP portions of this proposed project, with the relevant documents in the Department’s files.

The Record generated in this matter indicates that numerous members of the public offered comments regarding the Applicant's proposed project, both at the time of the public hearing on September 29, 2020, and during the time periods when the Record remained open to receive public comment (both prior to and subsequent to the hearing). The Department received approximately 200 comments overall, voicing both support and opposition to the proposed project.

At the request of this Hearing Officer, the technical experts in the Department's Division of Water, WSLs, and Division of Climate, Coastal and Energy, DCMP, prepared a TRM to (1) address the concerns associated specifically with the WSLs and DCMP aspects of the Applicant's proposed project, as voiced in the public comments received by the Department; and (2) offer conclusions and recommendations with regard to this pending permitting matter for the benefit of the Record. The TRM, dated September 29, 2021, provides a summary of only those comments received that fell within the scope of the WSLs and DCMP portions of the Applicant's proposed project, and offers detailed responses to the same.

I find that the TRM of September 29, 2021, as provided by the Department's experts in WSLs and DCMP, offers a comprehensive review of all aspects of the Applicant's pending WSLs Application and DCMP Certification, addresses the areas of concern voiced by the public that are germane to the subject matter of the aforementioned public hearing, and responds to them in a balanced manner, accurately reflecting the information contained in the Record as it relates to this scope of the proposed project. Thus, the TRM of September 29, 2021, the finalized WSLs Subaqueous Lands Draft Permit ("Permit"), and the finalized DCMP Draft Certification are all attached hereto as Appendices "A" through "C" and are expressly incorporated herein.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Currently pending before the Department is the WSLs Application submitted to the Department by DSPC, as well as the DCMP Certification with respect to the USACE authorizations also required for the project. I find that the Applicant is required to obtain both the WSLs Permit and the DCMP Certification for the proposed project, as noted above.

I further find that the specific aspects of the proposed project that fall under the permitting authority of the WSLs and DCMP are subject to various state and federal regulatory requirements as set forth above, including, but not limited to, *7 Del.C.* Chapters 60 and 72, with additional regulatory authority provided under the *Regulations Governing the Use of Subaqueous Lands* (7 DE Admin. Code 7504), the *Federal Consistency with Approved Coastal Management Programs* (15 CFR Part 930), and the *Delaware Coastal Management Program Federal Consistency Policies and Procedures* (7 DE Admin. Code 2201).

In reviewing the applicable statutes and regulations, as well as weighing public benefits of this project against potential detriments, the Department's experts in the WSLs and the DCMP have concluded that the pending WSLs Application and DCMP Certification submitted by DSPC complies with all applicable federal and state laws and regulations. Should this Application be approved, the WSLs Permit and DCMP Certification that would be issued by the Department would be reflective of the submissions by DSPC and would be appropriately conditioned to ensure continued protection of public health and the environment.

The Department's TRM acknowledges the comments received from the public concerning the Applicant's proposed project, and thoroughly responds to the same therein. While many comments voiced support of the DSPC's proposed project, other comments voiced concerns related to certain aspects of the Application that fall under the permitting authority of the WSLs and the DCMP.

Twelve (12) areas of concern, as voiced by the public in this matter, are discussed at length in the TRM, along with the Department's detailed responses to the same. For brevity's sake, this Report will identify each concern, and provide a summary of the Department's responses to the same. The entirety of the Department's responses to the comments received in this matter are fully set forth in the aforementioned TRM, which again has been expressly incorporated herein as Attachment "A."

Comments Received in Opposition to the Proposed Project

1. The proposed project represents a threat to Homeland Security

The DSPC owns the Port of Wilmington, including the property known as the Edgemoor site, where it seeks to permit and build a terminal container facility. As the TRM details, DSPC retained consultants and conducted a detailed review of the several bids received and selected GT (a subsidiary of Gulfainer Company Ltd., headquartered in the United Arab Emirates). The Board of Directors of GT and DSPC approved the transaction.

Statutory provisions in 29 *Del. C.* §8784(1) also required DSPC to obtain approval from the Delaware General Assembly. Multiple opportunities for public and stakeholder input were provided in advance of approval for this transaction. Before and after entering into the Concession Agreement, DSPC security was and continues to be handled jointly by the U.S. Coast Guard ("USCG") and U.S. Customs and Border Protection, both of which are part of U.S. Department of Homeland Security. Similarly, Customs and Border Protection provided, and continues to provide, security with respect to imported cargo leaving the Port of Wilmington.

The USCG has jurisdiction and provides overall security for the Port of Wilmington. All employees working at the Port of Wilmington are required to secure Transportation Workers Identification Credentials, which includes an extensive background check. During the term of the Concession Agreement, DSPC maintains certain oversight and consent rights regarding the operation of the Port of Wilmington, including the safety and security at the Port.

The TRM notes that the Concession Agreement provides for implementation and operation of safety and security standards applicable to Port operations in accordance with applicable federal, state, and local laws. Further, DSPC retains oversight rights regarding the implementation and operation of the above referenced safety standards and retains the right to terminate the Concession Agreement for material failures by GT to comply with such standards. GT has been operating the Port of Wilmington with its 350,000 plus twenty-foot equivalent units (TEUs) per year since 2018 without incident. Some public comments received by the Department voiced security concerns regarding the proposed project, based on the fact GT is a subsidiary of a foreign-owned private company headquartered in the United Arab Emirates. The TRM states that such concerns were fully addressed before the transaction was approved and were found to be unsubstantiated.

2. The proposed shoaling fans pose a risk to aquatic life and water quality

DSPC's original WSLs Application and Certification for the Port of Wilmington Expansion Project submitted to DNREC on March 16 and 18, 2020 included the installation and operation of SedCon Technologies, Inc.'s Turbo System anti-sedimentation devices ("shoaling fans") to minimize the need for maintenance dredging. DNREC's Division of Fish and Wildlife - Fisheries Section ("DFW Fisheries") reviewed the proposed project activities, including the use of shoaling fans. On December 14, 2020, DFW Fisheries provided comments on the project in relation to the proposed use of shoaling fans as an anti-sedimentation technique.

The DFW Fisheries commented that the installation and operation of the shoaling fans would increase fish mortality and degrade ecosystem function and aquatic habitat in the project area. Shoaling fans would have adverse impacts on fish directly through impingement and entrainment, and indirectly through increased sedimentation and potential resuspension of contaminants. Adult fishes impinged on the shoaling fans may also be killed. Fan intakes would entrain pelagic fish eggs and larvae. In addition to the entrainment and impingement impacts, DFW Fisheries noted that spawning runs could be altered by the noise produced by the fan blades. All these concerns were passed on to the Applicant to be addressed.

In response to the above concerns that shoaling fans may pose a risk to aquatic life and water quality, DSPC modified the scope of the project activities to remove the use of shoaling fans. On July 1, 2021, the consultant for the Applicant, Duffield Associates, submitted a revision to the project plans that reflects the removal of the shoaling fans from the project design. The removal of the shoaling fans from the Application, coupled with the Applicant's proposed compensatory mitigation package, (described in greater detail further herein), address the significant portions of concern the Department had regarding the potential impacts to aquatic resources in regard to Delaware's *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, specifically, Sections 4.7.1.2, 4.7.1.3, 4.7.1.4, and 4.7.4.

3. The proposed dredging activities will impact water quality

The Department's TRM acknowledges that dredging activities have the potential to increase turbidity in the river around the cutterhead, causing sediment particles and associated contaminants to become suspended in the river water, and thus impact water quality. However, the impacts are expected to be limited in extent, and will be monitored during the entire course of dredging activities to ensure impacts do not extend beyond regulatory boundaries.

Per an approved monitoring plan, turbidity/total suspended solids, among other physical parameters, will be measured regularly behind the cutterhead, and at background locations upstream and downstream of the dredging activities. Water quality samples and sediment samples will be collected regularly to evaluate water/sediment chemistry and to compare results to modeled predictions. Those samples will be analyzed for pH, hardness, organic carbon content, inorganic compounds (metals), pesticides, polycyclic aromatic hydrocarbons ("PAHs"), dioxins and furans and PCBs. While previous studies indicate that most (approximately 98%) of the dredged sediments will be captured and retained in Confined Disposal Facilities ("CDFs"), a small amount may be released back into the water through elutriate discharge.

Per the approved monitoring plan, DSPC will be required to conduct monitoring of the CDF influent and effluent. During active dredging, dredge slurry (influent) will be sampled regularly and will be allowed to separate into water and sediment. Sediment and water samples will be analyzed for organic carbon content, inorganic compounds (metals), pesticides, PAHs, dioxins and furans and PCBs. Effluent water samples will be collected at the same frequency as influent samples and will be analyzed for the same chemical parameters. When influent and effluent data is combined with measurements of flow rate, a mass balance calculation can be done to determine the overall retention of contaminants in the CDF.

If any data collected during the course of active dredging and active discharge from the CDF are outside of applicable Delaware River Basin Commission and DNREC water quality criteria, then corrective actions will be implemented to address non-compliant conditions. The TRM states that the proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the potential impacts to water quality in regard to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.1.

4. The activities associated with the project will result in increased air emissions

The DCMP coordinated with the Department's Division of Air Quality ("DAQ") for input on air quality concerns related to the proposed activities included in this project. DAQ supports efforts that preserve public health and safety and promote smart growth. Activities associated with the proposed project must comply with all Delaware Air Quality Regulations (*Division of Air Quality*, 7 DE Admin. Code 1100) to not exceed air quality emission thresholds.

To reduce emissions associated with the construction phase of the project, DAQ recommends that retrofitted on-road and non-road diesel engines be used. Existing DAQ Regulations require the use of dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement, and use of unpaved roads and the use of covers on trucks that transport material to and from a site to prevent visible emissions (*Particulate Emissions from Construction and Materials Handling*, 7 DE Admin. Code 1106).

Additionally, Delaware Air Quality Regulations require a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimis levels (*Conformity of General Federal Actions to the State Implementation Plans*, 7 DE Admin. Code 1135). Delaware Air Quality Regulations also restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes (*Excessive Idling of Heavy-Duty Vehicles*, 7 DE Admin. Code 1145).

Compliance with the above referenced Air Quality Regulations and the incorporation of the DAQ recommendations address the concern the Department had regarding the potential impacts to water quality in regard to *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.5.

5. The proposed project represents a threat to public health, especially in Environmental Justice communities

DNREC has placed great importance on understanding and addressing Environmental Justice concerns raised by communities in the vicinity of the proposed project site. As such, special consideration was taken to incorporate mitigation requirements that would result in improvements to the local environment and increase recreational opportunities for the residents of neighboring communities.

The Department's TRM notes that, as required under Delaware's *Regulations Governing Hazardous Waste* (7 DE Admin. Code 1302) and the *Resource Conservation and Recovery Act* (RCRA), a site Risk Assessment ("RA") was conducted which analyzed contaminant data from the upland (former DuPont/Chemours) property for potential risk to human health and the environment using appropriate guidelines and parameters. The RA considered all routes of potential exposure and determined that no unacceptable risk was posed to human health or the environment from contaminants at the site as long as the impacted media remains buried in place (thereby removing the potential pathway of exposure).

Based upon the RCRA Facility Investigation (“RFI”) in conjunction with the RA, and in consideration of the site’s future use, the presumptive site remedy of capping, construction management, groundwater monitoring and an environmental covenant, proposed in the Statement of Basis (“SB”) and enforced by the conditions of the RCRA permit, issued April 29, 2021, work together to assure ongoing protection of both human health and the environment.

Furthermore, DNREC is requiring that the Applicant mitigate for potential negative impacts related to the proposed project, including the loss of 5.5 acres of subaqueous habitat. The DSPC, as a condition of the issuance of the WSLs Permit and DCMP Certification concurrence, must complete the State of Delaware Compensatory Mitigation Plan, which includes habitat and recreational enhancements that will benefit the residents of communities adjacent to the proposed project site. Some of these enhancements will occur at FPSP. FPSP, located on Lighthouse Road in Wilmington, Delaware, is in close proximity to the proposed project site. Communities located near the proposed project site have easy access to FPSP, therefore improvements to this park will also provide enhancements to the communities around the Edgemoor site. Additional information detailing the specific components of the State of Delaware Compensatory Mitigation Plan for the Applicant’s proposed project will be discussed in detail further herein.

The presumptive remedy and enforcement of the RCRA requirements address the significant portions of concern the Department had regarding the potential impacts to water quality in regard to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.6. Additionally, the proposed compensatory mitigation package, described in greater detail further herein, is considered adequate mitigation pursuant to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.4 and 4.7.4.

6. The regulatory process needs to be transparent, and members of the public need a voice in the process

The Record developed in this matter reflects that DNREC published a joint public notice on August 23, 2020, to announce the receipt of the requisite permit applications and a DCMP Certification received from the Applicant, DSPC, and of a scheduled public hearing. DNREC held that public hearing on September 29, 2020, to provide members of the public with a description of the proposed project, an overview of the regulatory processes associated with reviewing the proposed project, and to allow for the public to submit live comments concerning the proposed project in its entirety.

The public comment period was originally scheduled to close on November 1, 2020 (which represented a 71-day comment period). On October 30, 2020, at the request of members of the public, DNREC extended the public comment period to December 1, 2020, thus providing a 101-day comment period for the public to submit comments for the Department's consideration. DNREC values transparency and public engagement, thus, documents were made available to the public during the entire 101-day comment period, and the public was given an extended public comment period to submit questions and comments for inclusion into the Record generated in this matter.

Additionally, the TRM notes that the DCMP considers issues raised by network partners, stakeholders and members of the public during a project's public comment period and, where applicable, engages with the Applicant to address concerns through project modification. Furthermore, the statutory requirements for the WSLs that require public notice upon receipt of an application are intended to allow for the public comments and concerns, including those expressed during the public hearing, to be considered during the detailed technical review of the project.

7. The proposed project is a violation of Delaware House Joint Resolution Ten (HJR-10)

DNREC's *Regulations Governing Solid Waste* requires that solid waste handling and disposal be conducted in a manner and under conditions which will eliminate the dangerous and deleterious effects of improper solid waste handling and disposal upon the environment and upon human health, safety, and welfare (7 DE Admin. Code 1301, Section 1.0). The TRM notes that Delaware House Joint Resolution 10 (HJR-10) directed the Department of Transportation ("DelDOT") to work with the Delaware Solid Waste Authority ("DSWA") to produce a report by September 30, 2020, that compared the financial and environmental impacts to Delaware of the current, uncoordinated trash collection system in New Castle County to the impacts of a coordinated system with one vendor collecting all the trash and recycling in an entire neighborhood. The Department concludes in the TRM that the activities associated with the proposed project are not in violation of HJR-10.

8. The proposed project will create traffic flow and volume problems

The lead state agency overseeing traffic flow and volume in Delaware is DelDOT. As such, DelDOT staff responded to the specific concerns that pertain to this topic area.

The full responses from DelDOT concerning potential traffic issues associated with the proposed project are available for review in the Department's TRM attached hereto. For brevity's sake, this Report notes that the TRM contains no responses to the public's potential traffic concerns that would justify a denial of the DCMP Certification associated with the Applicant's proposed project.

9. The proposed project will result in a loss of recreational fishing and crabbing

The location of this project on the Delaware River is a known habitat of the Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*), two species that are listed as endangered under the Endangered Species Act (“ESA”). In order to minimize impacts to sturgeon and other commercially and recreationally valuable species during their spawning periods, DNREC requires that no in-water work occurs from March 15th through June 30th. This “time-of-year restriction” will be observed for all in-water work including, but not limited to, pile driving, construction, installation of temporary bulkhead wall and sheet pile walls, and all dredging including maintenance dredging.

Additionally, DNREC requires a soft start on all pile driving activities. Cherry Island Flats is an important fish habitat and one of the major striped bass spawning areas of the Delaware River. Due to the proximity of the project to Cherry Island flats, DNREC also requires in-situ turbidity monitoring of the flats be conducted during dredging activities associated with the construction of the port to ensure that the activity is not adversely impacting sensitive species.

The TRM notes that, if granting a permit will result in loss of a substantial resource to the public, then DNREC has the authority to require a permittee to take measures which will offset or mitigate the loss (7 Del.C. §7205, and the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, subsection 3.4). As noted previously, DNREC has required the Applicant to mitigate for the loss of 5.5 acres of subaqueous lands associated with the proposed project, and the details of DSPC’s State of Delaware Compensatory Mitigation Plan will be addressed in greater detail further herein. The Department considers the proposed compensatory mitigation package to be adequate mitigation, pursuant to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.4 and 4.7.4.

10. There are concerns regarding sediment and contaminants such as PCBs

As noted above, the portion of the Applicant's proposed project that fell under the permitting authority of the Department's DWHS-RS was previously approved with the execution of DNREC Secretary's Order No. 2021-WH-0014 and the issuance by DNREC of a RCRA CAP Renewal Permit to the DSPC (Effective Date: April 29, 2021). The Department's DWHS Corrective Action Section ("CAS") has been managing/overseeing the environmental cleanup of the upland portion of the former DuPont/Chemours Edgemoor site, where the new port will be constructed, in accordance with the federal RCRA program.

Critical to long term protection and improvement of human and ecological health from contaminants in the sediment will be proper management of the dredged material and associated CDF elutriate generated during dredging for port construction. A Monitoring Plan for Construction Dredging and Dredged Slurry has been developed by DSPC and approved by DNREC and USACE. The TRM concludes that the RCRA remedial actions, detailed sediment characterization, removal of the contaminated sediments during the dredging, associated risk assessment, and proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the potential contaminated sediment transport in regard to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin. Code 7504, Sections 4.7.1.1, 4.7.1.6 and 4.7.2.

11. A hydrogeologic site investigation is needed

As noted above, a comprehensive hydrogeologic site investigation was performed as part of the sitewide RCRA Facility Investigation ("RFI"). The TRM states that the Department's RCRA remedial actions, the detailed site characterization, sediment characterization, removal of the contaminated sediments during the dredging, associated risk assessment, and proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the cumulative and secondary effects on the aquatic ecosystem, natural surface and groundwater hydrology in regard to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin Code 7504, Section 4.7.3.

12. Incomplete/Insufficient navigational studies, particularly for emergency scenarios

The Application includes a report by the Maritime Institute of Technology and Graduate Studies (“MITAGS”) that assesses typical expected navigational scenarios and, as the TRM notes, concludes that “[t]he simulation results indicated the proposed Edgemoor Terminal would have minimal impact on ships as they transit the existing navigation channel.” The Department received public comments that alleged that the proposed turning basin would negatively impact navigation of vessels on the main channel and that there would be impacts to shipping that may occur in non-typical emergency scenarios (i.e., ships losing power while turning). These concerns were passed on to the Applicant to be addressed.

In response, the Applicant’s consultant, Duffield Associates, provided additional information to DNREC on March 4, 2021. This additional information included a letter from David K. Cuff, President of The Pilots’ Association for the Bay & River Delaware (“Pilots’ Association”) to Mr. Eugene Bailey, Executive Director of the DSPC. The Pilots’ Association reviewed the Navigation Feasibility Study for the Port of Wilmington Edgemoor Expansion project produced by the MITAGS and concurred with the above-cited statement in the MITAGS report that the proposed Edgemoor Terminal would have minimal impacts on ships traveling on the existing navigation channel.

Additionally, DNREC coordinated with Lieutenant Commander Andrew Cooke, USCG Sector Delaware Bay, to receive input from the USCG on the navigational components of this proposed project. On September 17, 2021, USCG Sector Delaware Bay stated that it does not see this project posing a risk to safe navigation. The TRM concludes that the Applicant’s proposed plans meet all appropriate setback and siting criteria pursuant to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin Code 7504, Section 4.9. Additionally, the input that was received from the Pilots’ Association for the Bay & River Delaware and the USCG have also adequately addressed the expressed navigational concerns pursuant to the *Regulations Governing the Use of Subaqueous Lands*, 7 DE Admin Code 7504, Section 4.8.4.

Comments in Support of the Proposed Project

The Department received numerous comments in support of the Applicant's proposed project. The supportive comments were submitted from a variety of individuals and groups, as set forth in the Department's TRM, and are available for review in their entirety on the Department's hearing web page dedicated to the Record developed in this matter.

The comments expressing support of the Application note the many benefits associated with the proposed project, including the creation of an employment hub that will provide approximately 1,000 new jobs for area residents. The proposed project will help fill the void created by the jobs lost with the closure of area manufacturing plants. These new job opportunities will offset unemployment in Wilmington and Northern New Castle County, and will provide work for local, highly skilled tradesmen and craftsmen.

The project will not only save current jobs for skilled tradesmen and craftsmen, but also create new jobs for both blue-collar laborers and skilled workers. In addition to the jobs created directly for dock work, jobs will also be created for the building trades, trucking industry, and other support industries throughout the community. These jobs, and the community revitalization they will support, can help address local issues of unemployment.

The proposed project will also address legacy environmental issues related to the site's previous industrial uses. Construction of the new port would result in a clean, environmentally friendly business on a currently inactive parcel of land previously used for heavy industry.

Furthermore, this project would help revitalize the shipping industry in Delaware. Delaware would be able to accept the larger vessels coming to the east coast as a result of the expansion of the Panama Canal and the Suez Canal. The new port would allow Delaware to accept the larger container ships that are being more widely used to transport cargo, thus enabling Delaware to compete regionally and nationally, and to keep up with the evolving needs of the shipping industry.

Components of the State of Delaware Compensatory Mitigation Plan for DSPC

As noted above, compensatory mitigation is required of the Applicant for the filling of 5.5 acres of subaqueous lands of the State of Delaware related to the construction activities associated with the proposed project. In his memorandum dated September 26, 2021, Mr. Cargill from the Department's Watershed Assessment and Management Section (as previously identified herein) set forth the components of the State Compensatory Mitigation Plan for DSPC ("Mitigation Plan") for inclusion into the Record developed in this matter. The Mitigation Plan provides an adequate combination of direct in-kind replacement of lost habitat by the creation of new intertidal wetland habitat in the immediate area of the project, statewide fisheries' benefits by the incorporation of the Environmental DNA monitoring program and reconnects the impacted local community to the Delaware River by means of enhancements to FPSP.

For Phase One of the Mitigation Plan, DSPC will construct approximately one (1) acre of intertidal wetland along the Delaware River at the north end of FPSP as an "in-kind" component of habitat replacement to partially compensate for what is being lost through the proposed construction of the port. DSPC shall be responsible for all aspects of the project. This will include obtaining any necessary authorizations, construction of the wetland, and three (3) years of monitoring, maintenance and reporting to ensure that the wetland habitat creation is a success.

In Phase Two of the Mitigation Plan, to provide additional compensatory mitigation, the DSPC will provide funding to establish an Environmental DNA ("eDNA") Fisheries Monitoring Program under the operation and management of DNREC. The first project administered through that program will focus on monitoring around the proposed project area and the surrounding Christina River watershed before, during and after dredging. Additionally, DNREC will expand the eDNA monitoring to other rivers, creeks and ponds in Delaware to monitor endangered species, invasive species, and other species of interest. The data collected will help DNREC to evaluate and understand potential impacts of the proposed project on both resident and transient fish species that utilize the Delaware River and will help to supplement traditional data collection methods used by DNREC fisheries managers in other water bodies throughout the State of Delaware.

Phase Three of the Mitigation Plan provides for increased public access at FPSP to the natural resources of the Delaware River. The DSPC will consult with DNREC to produce landscape designs for an improved walking trail around the newly created intertidal wetland, a viewing/observation platform that will facilitate associated education opportunities, and substantial vegetation removal to restore the view of the Delaware River along the length of the park. Additional enhancements under consideration include roadway and lighting improvements, restroom repairs, and other amenities aimed at increasing public access to the natural resources of FPSP and the Delaware River.

For the benefit of the Record, the aforementioned memorandum authored by Mr. Cargill, dated September 26, 2021, which summarized the Applicant's Mitigation Plan, is expressly incorporated into the Record and attached hereto as Attachment "D."

The Department's experts in the WSLS and the DCMP have addressed all public comments and concerns specifically related to the proposed project and the Application currently pending before the Department, as provided in the public notice and public hearing process. Furthermore, the WSLS and the DCMP have thoroughly considered all public concerns in the finalized WSLS draft permit and DCMP Certification that would be issued to DSPC in this matter.

The Record developed in this matter indicates that the Department's experts in WSLS and DCMP have conducted a comprehensive review of the information provided by the Applicant, considered all statutes and regulations that govern projects such as the Applicant's above proposed activities, reviewed the Mitigation Plan as submitted to DNREC by the DSPC, and determined that the Record provides adequate justification and detail to support the proposed project. Additionally, as noted in the TRM, DNREC obtained independent confirmation from external agencies (e.g., DelDOT and USCG) where needed to evaluate the public's concerns in areas beyond the Department's standard regulatory purview. As a result of this comprehensive review, the Department's experts have recommended issuance of the WSLS Subaqueous Lands Permit and the DCMP Certification.

I find and conclude that the Applicant has adequately demonstrated compliance with all requirements of the statutes and regulations, has submitted the requisite Compensatory Mitigation Plan required for the filling of 5.5 acres of subaqueous lands of the State of Delaware related to the proposed construction associated with this project, and is continuing to work with the Department to assure that all commitments and ongoing compliance requirements are met.

I further find that the Record supports approval of the WSLS Application and DCMP Certification, as submitted by DSPC in this matter. Moreover, I find and conclude that the Record supports the recommendations of the Department's experts in WSLS and DCMP, as set forth in the TRM of September 29, 2021, including, but not limited to, the recommendation concerning the issuance of the WSLS Subaqueous Lands Permit and the DCMP Certification for the Applicant, consistent with the Record developed in this matter, and with appropriate conditions, for the reasons noted above.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has jurisdiction under 7 *Del.C.* Chapters 60 and 72, with additional authority under the *Regulations Governing the Use of Subaqueous Lands* (7 DE Admin. Code 7504), the *Federal Consistency with Approved Coastal Management Programs* (15 CFR Part 930), the *Delaware Coastal Management Program Federal Consistency Policies and Procedures* (7 DE Admin. Code 2201), and all other relevant statutory authority, to make a final determination on the Application after holding a public hearing, considering the public comments, and all information contained in the Record generated in this matter;
2. The Department provided proper public notice of the WSLS Application and the DCMP Certification submitted by DSCP for the proposed project, and of the public hearing held on September 29, 2020, and held said hearing to consider any public comment that may be offered on the same, in a manner required by the law and regulations;

3. The Department considered all timely and relevant public comments in the Record, as established in the TRM dated September 29, 2021, provided by the Department's experts in the WSLS and the DCMP, as well as the supplemental documentation provided in Mr. Cargill's memorandum summarizing the Mitigation Plan for DSPC, dated September 26, 2021, both of which have been expressly incorporated into the Record generated in this matter and are attached to this Report as Attachments "A" and "D," respectively;
4. The Department has carefully considered the factors required to be weighed in issuing the aforementioned WSLS Permit and the DCMP Certification, as necessitated by the Applicant's proposed project, and finds that the Record supports approval of the same;
5. The Department shall issue to DSPC Subaqueous Lands Permit No. SP-101/20 and DCMP – Federal Consistency Certification for Port of Wilmington Edgemoor No. FC 2020.0043, consistent with the Record developed in this matter. Furthermore, the aforementioned WSLS Permit and DCMP Certification shall include all conditions necessary to ensure that Delaware's environment and public health will be protected from harm;
6. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and
7. The Department shall serve and publish its Order on its internet site.

/s/Lisa A. Vest
LISA A. VEST
Regulatory Specialist

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Attachment A: TRM (09/29/21)

Attachment B: WSLS Finalized Draft Subaqueous Lands Permit (09/29/2021)

Attachment C: DCMP Finalized Draft Federal Consistency Certification for Port of Wilmington Edgemoor (09/29/2021)

Attachment D: WSLS Memorandum RE: Components of the State Compensatory Mitigation Plan for DSPC (09/26/21)



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

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Technical Response Memorandum

To: Lisa Vest, Hearing Officer

Through: Steven Smailer, DW Program Administrator
Kimberly Cole, DCCE Program Administrator

From: Laura Mensch, DCCE Program Manager
John Cargill, DWS Hydrologist
Katie Esposito, DW Environmental Scientist

Date: September 29, 2021

Subject: Diamond State Port Corporation, Edgemoor Container Port, 4600 Hay Road,
Edgemoor, New Castle County, Delaware, 19809

INTRODUCTION

The Diamond State Port Corporation (DSPC) proposes to construct a new container port on the Delaware River at DSPC's Edgemoor property, located at 4600 Hay Road, Edgemoor, New Castle County, Delaware, 19809. The project will require permits from the Department of Natural Resources and Environmental Control (DNREC) Division of Water, Wetland and Subaqueous Lands Section (WSLS) and Division of Waste and Hazardous Substances, Remediation Section, as well as a federal consistency certification from the Division of Climate, Coastal and Energy's Delaware Coastal Management Program (DCMP) with respect to the United States Army Corps of Engineers (USACE) authorizations also required for the project.

PROJECT SITE

The property (tax parcels: 0615300006 and 0615300003) is the former location of the Chemours titanium dioxide production facility. It lies along the Delaware River between Fox Point State Park (FPSP), to the north, and industrial facilities to the south. The site operated as a titanium dioxide production facility through 2016. That facility was demolished before the sale of the property to the Diamond State Port Corporation in February of 2017. The proposed project is located adjacent to and north of the federal navigation channel, in the southern portion of Reach B of the Delaware River, at the intersection of the Cherry Island and Bellevue Ranges and is offshore of the applicant's property located Hay Road, in Edgemoor, Delaware.

PROJECT DESCRIPTION

The proposed project includes building a pile-supported wharf (approximately 2,600 feet in length), dredging the berth and access channel to a depth of 45 feet below mean low water, installing a bulkhead along 3,200 feet of shoreline and occupying approximately 5.5 acres of subaqueous lands. The applicant proposes to deepen portions of the Delaware River adjacent to the federal navigation channel to create a primary access channel that would serve the proposed berth construction at the site.

The majority of the dredged materials would be stored in existing USACE-owned confined disposal facilities with a portion retained on-site to be used as fill material. The use of shoaling fans, proposed in the original application materials, was removed from the scope of the proposed activities after consultation with the applicant.

REVIEW AUTHORITY

Authority for the Department's review of the matters contained herein is established in the following:

- The Subaqueous Lands Act (7 Del C., Chapter 72)
- The Regulations Governing the Use of Subaqueous Lands (7 DE Admin. Code 7504)
- Federal Consistency with Approved Coastal Management Programs (15 CFR Part 930)
- Delaware Coastal Management Program Federal Consistency Policies and Procedures (7 DE Admin. Code 2201)

The Department processed all DSPC permit applications necessary for this proposed project together to assure transparency, and to make sure the public was afforded the ability to provide meaningful comment on the complete project proposed for the Edgemoor property, as noted above. The portion of this project that fell under the permitting authority of the Department's Division of Waste and Hazardous Substances, Remediation Section (specifically, the implementation of corrective measures and post-closure care that would be authorized under a RCRA CAP Renewal), was approved with the execution of DNREC Secretary's Order No. 2021-

WH-0014, and the issuance by DNREC of a RCRA CAP Renewal Permit to the DSPC (Effective Date: April 29, 2021). Thus, this Technical Response Memorandum (TRM) concerns only the remaining permit applications of DSPC still pending with the Department's Division of Water, WSLs, and the federal consistency certification from the Division of Climate, Coastal and Energy, DCMP, and addresses comments and questions submitted to DNREC during the project's public comment period, from August 23, 2020, to December 1, 2020, with references to how the regulatory requirements were met, where appropriate.

PUBLIC PARTICIPATION

On August 23, 2020, DNREC issued a joint public notice of permit applications and federal consistency certification received from DSPC, and of a public hearing to be held by DNREC on September 29, 2020. The public comment period was originally scheduled to close on November 1, 2020, which represents a 71-day comment period. On October 30, 2020, at the request of members of the public, DNREC extended the public comment period to December 1, 2020, which represents a 101-day comment period.

During the public comment period DNREC received 196 comments, 3 of which were submitted live during the September 29, 2020, public hearing, the remainder were submitted in writing before or after the public hearing.

DNREC received both comments of support and opposition. Comments opposing the proposed structure stated the following topics of concern: homeland security, impacts of the proposed shoaling fans, community engagement and transparency, public health/environmental justice, violation of House Joint Resolution Ten (HJR-10), fishing/crabbing, natural resources, air quality, navigational concerns, and water quality. Comments in favor of the proposed structure noted the benefit to Delaware from building a port of call for larger container ships, job creation and economic development, and the cleanup and redevelopment of a currently inactive parcel.

TOPICS

1. Comment Subject: The proposed project represents a threat to Homeland Security

As this topic is outside the purview of the Department, additional information was provided. The DSPC owns the Port of Wilmington, including the property known as the Edgemoor site where it seeks to permit and build a terminal container facility. The DSPC solicited bids for a public/private partnership to help improve, develop, finance, and operate the Port of Wilmington (including development of the Edgemoor site) via a long-term concession agreement. DSPC retained consultants and conducted a detailed review of the several bids received and selected GT. GT is a subsidiary of GulfTainer Company Ltd., headquartered in the United Arab Emirates, and is one of the largest global port operators in the world, including the Canaveral Cargo Terminal near the Cape Canaveral Spaceport in central Florida. As part

of this selection process, DSPC and its representative conducted a review of GT and its parent company, Gulftainer Company Ltd.

DSPC and its representatives visited several of the facilities operated by Gulftainer, including the Canaveral Cargo Terminal and Khorfakkan Container Terminal. Gulftainer also operates Sharjah Container Terminal and Sharjah Inland Container Terminal Depot. The Board of Directors of GT and DSPC approved the transaction.

Additionally, statutory provisions in 29 Del. C. §8784(1) required DSPC to obtain approval from the Delaware General Assembly. Multiple opportunities for public and stakeholder input were provided in advance of approval for this transaction. Before and after entering into the Concession Agreement, DSPC security was and continues to be handled jointly by the U.S. Coast Guard (USCG) and U.S. Customs and Border Protection, both of which are part of U.S. Department of Homeland Security. Similarly, Customs and Border Protection provided, and continues to provide, security with respect to imported cargo leaving the Port of Wilmington.

The USCG has jurisdiction and provides overall security for the Port of Wilmington. All employees working at the Port of Wilmington are required to secure Transportation Workers Identification Credentials, which includes an extensive background check. During the term of the Concession Agreement, DSPC maintains certain oversight and consent rights regarding the operation of the Port of Wilmington, including the safety and security at the Port. The Concession Agreement provides for implementation and operation of safety and security standards applicable to Port operations in accordance with applicable federal, state and local laws. DSPC retains oversight rights regarding the implementation and operation of such safety standards and retains the right to terminate the Concession Agreement for material failures by GT to comply with such standards.

GT has been operating the Port of Wilmington with its 350,000 plus twenty-foot equivalent units (TEUs) per year since 2018 without incident. Some public comments have raised security concerns to DNREC based on the fact GT is a subsidiary of a foreign-owned private company headquartered in the United Arab Emirates. This concern was addressed before the transaction was approved and was found to be unsubstantiated.

2. Comment Subject: The proposed shoaling fans pose a risk to aquatic life and water quality

DSPC's original permit applications and consistency certification for the Port of Wilmington Expansion Project submitted to DNREC on March 16 and 18, 2020 included the installation and operation of SedCon Technologies, Inc. (SedCon) Turbo System anti-sedimentation devices (shoaling fans) to minimize the need for maintenance dredging.

DNREC's Division of Fish and Wildlife (DFW) Fisheries Section reviewed the proposed project activities, including the use of shoaling fans. On December 14, 2020, DNREC DFW Fisheries Section provided comments on the project in relation to the proposed use of shoaling fans as an anti-sedimentation technique. The DFW Fisheries Section commented that the

installation and operation of the shoaling fans would increase fish mortality and degrade ecosystem function and aquatic habitat in the project area. Shoaling fans would have adverse impacts on fish directly through impingement and entrainment, and indirectly through increased sedimentation and potential resuspension of contaminants. Adult fishes impinged on the shoaling fans may also be killed. Fan intakes would entrain pelagic fish eggs and larvae. In addition to the entrainment and impingement impacts, spawning runs could be altered by the noise produced by the fan blades. These concerns were passed on to the applicant to be addressed.

In response to the concerns that shoaling fans may pose a risk to aquatic life and water quality, DSPC modified the scope of the project activities to remove the use of shoaling fans. On March 25, 2021, DSPC submitted a letter requesting that DNREC “suspend its consideration of the use of anti-sedimentation devices (shoaling fans)”. On July 1, 2021, the consultant for the applicant, Duffield Associates, submitted a revision to the project plans, which reflect the removal of the shoaling fans from the project design. The removal of the shoaling fans from the application, coupled with proposed compensatory mitigation package, including the habitat restoration/creation work at Fox Point State Park (FPSP) and the enhanced environmental DNA monitoring address the significant portions of concern the Department had regarding the potential impacts to aquatic resources in regard to Subaqueous Lands Regulation Sections 4.7.1.2, 4.7.1.3, 4.7.1.4, and 4.7.4 (7 DE Admin. Code 7504).

3. Comment Subject: The proposed dredging activities will impact water quality

Dredging activities have the potential to increase turbidity in the river around the cutterhead, causing sediment particles and associated contaminants to become suspended in the river water, and thus impact water quality. However, the impacts are expected to be limited in extent, and will be monitored during the entire course of dredging activities to ensure impacts do not extend beyond regulatory boundaries. Per an approved monitoring plan, turbidity/total suspended solids, among other physical parameters, will be measured regularly behind the cutterhead, and at background locations upstream and downstream of the dredging activities. Further, water quality samples and sediment samples will be collected regularly to evaluate water/sediment chemistry and to compare results to modeled predictions. Samples will be analyzed for pH, hardness, organic carbon content, inorganic compounds (metals), pesticides, polycyclic aromatic hydrocarbons (PAHs), dioxins and furans and PCBs.

While previous studies indicate that most (approximately 98%) of the dredged sediments will be captured and retained in Confined Disposal Facilities (CDFs), a small amount may be released back into the water through elutriate discharge. Per the approved monitoring plan, DSPC will be required to conduct monitoring of the CDF influent and effluent. During active dredging, dredge slurry (influent) will be sampled regularly and will be allowed to separate into water and sediment. Sediment and water samples will be analyzed for organic carbon content, inorganic compounds (metals), pesticides, PAHs, dioxins and furans and PCBs. Effluent water samples will be collected at the same frequency as influent samples and will be analyzed for the same chemical parameters. When influent and effluent data is combined with

measurements of flow rate, a mass balance calculation can be done to determine the overall retention of contaminants in the CDF.

If any data collected during the course of active dredging and active discharge from the CDF are outside of applicable Delaware River Basin Commission and DNREC water quality criteria, then corrective actions will be implemented to address non-compliant conditions. The proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the potential impacts to water quality in regard to Subaqueous Lands Regulation Sections 4.7.1.1 (7 DE Admin. Code 7504).

4. Comment Subject: The activities associated with the proposed project will result in increased air emissions

The DCMP coordinated with the Division of Air Quality (DAQ) for input on air quality concerns related to the proposed activities included in this project. DAQ supports efforts that preserve public health and safety and promote smart growth. Activities associated with the proposed project must comply with all Delaware Air Quality Regulations to not exceed air quality emission thresholds. To reduce emissions associated with the construction phase of the project, DAQ recommends that retrofitted on-road and non-road diesel engines be used. Existing Delaware Air Quality Regulations require the use of dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement, and use of unpaved roads and the use of covers on trucks that transport material to and from a site to prevent visible emissions (7 DE Admin. Code 1106). Additionally, Delaware Air Quality Regulations require a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the *de minimis* levels (7 DE Admin. Code 1135). Delaware Air Quality Regulations also restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes (7 DE Admin. Code 1145). Compliance with the Air Quality Regulations and incorporation of the DAQ recommendations address the concern the Department had regarding the potential impacts to water quality in regard to Subaqueous Lands Regulation Sections 4.7.1.5 (7 DE Admin. Code 7504).

5. Comment Subject: The proposed project represents a threat to public health, especially in Environmental Justice communities

DNREC has placed great importance on understanding and addressing Environmental Justice concerns raised by communities in the vicinity of the proposed project site. As such, special consideration was taken to incorporate mitigation requirements that would result in improvements to the local environment and increase recreational opportunities for the residents of neighboring communities.

As required under the Delaware Regulations Governing Hazardous Waste, and the Resource Conservation and Recovery Act (RCRA), a site Risk Assessment (RA) was conducted which analyzed contaminant data from the upland (former DuPont/Chemours) property for potential

risk to human health and the environment using appropriate guidelines and parameters. The RA considered all routes of potential exposure and determined that no unacceptable risk was posed to human health or the environment from contaminants at the site as long as the impacted media remains buried in place (thereby removing the potential pathway of exposure). Based upon the RCRA Facility Investigation (RFI) in conjunction with the RA and in consideration of the site's future use, the presumptive site remedy of capping, construction management, groundwater monitoring and an environmental covenant, proposed in the Statement of Basis (SB) and enforced by the conditions of the RCRA permit, issued April 29, 2021, work together to assure ongoing protection of both human health and the environment.

DNREC is requiring that the applicant mitigate for potential negative impacts related to the proposed project, including the loss of 5.5 acres of subaqueous habitat. DSPC, as a condition of the Subaqueous Lands Permit and federal consistency certification concurrence, must complete a mitigation plan that includes habitat and recreational enhancements that will benefit the residents of communities adjacent to the proposed project site. Some of these enhancements will occur at FPSP.

FPSP, located on Lighthouse Road in Wilmington, Delaware, is in close proximity to the proposed project site. Communities located near the proposed project site have easy access to FPSP, therefore improvements to this park will also provide enhancements to the communities around the Edgemoor site. DSPC, as a condition of the Subaqueous Lands Permit and federal consistency certification concurrence, is providing habitat and recreational enhancements at FPSP. Habitat enhancements include the creation of approximately 1 acre of intertidal habitat in an area of the park currently occupied by the invasive species *Phragmites australis* (north end of the park). Non-native Phragmites can negatively affect the biodiversity and ecological functions of invaded habitats, impair the recreational use of wetlands and shorelines, decrease property values, and increase fire risk. The removal of this invasive species and creation of intertidal habitat will improve the ecological health of the area. Potential recreational enhancements include the creation of a trail and overlook at the location of the new wetland, clearing of the viewscape to the river along the existing trail, paving of the access road and trail head leading to the north end of the park, and restroom facility repair/improvements. Details of the enhancements are still being developed.

The presumptive remedy and enforcement of the RCRA requirements address the significant portions of concern the Department had regarding the potential impacts to water quality in regard to Subaqueous Lands Regulation Sections 4.7.1.6 (7 DE Admin. Code 7504). The proposed compensatory mitigation package, including the habitat restoration/creation work at FPSP and the enhanced environmental DNA monitoring are considered adequate mitigation pursuant to Subaqueous Lands Regulation Sections 4.7.1.4 and 4.7.4 (7 DE Admin. Code 7504).

6. Comment Subject: The regulatory process needs to be transparent, and members of the public need a voice in the process

DNREC published a joint public notice on August 23, 2020, to announce the receipt of permit applications and a federal consistency certification from the applicant, DSPC, and of a scheduled public hearing. DNREC held a public hearing on September 29, 2020, to provide members of the public with a description of the proposed project, an overview of the regulatory processes associated with reviewing the proposed project, and to allow for the public to submit live comments. In addition, the public comment period was originally scheduled to close on November 1, 2020, which represents a 71-day comment period. On October 30, 2020, at the request of members of the public, DNREC extended the public comment period to December 1, 2020, which represents a 101-day comment period. DNREC values transparency and public engagement, which is why documents were made available to the public for the duration of the 101-day comment period, and why the public was given an extended public comment period to submit questions and comments to DNREC.

The DCMP considers issues raised by network partners, stakeholders and members of the public during a project's public comment period and, where applicable, engages with the applicant to address concerns through project modification.

The statutory requirements for the WSLS that require public notice upon receipt of an application are intended to allow for the public comments and concerns, including those expressed during the public hearing, to be considered during the detailed technical review of the project.

7. Comment Subject: The proposed project is a violation of Delaware House Joint Resolution Ten (HJR-10)

DNREC requires that solid waste handling and disposal be conducted in a manner and under conditions which will eliminate the dangerous and deleterious effects of improper solid waste handling and disposal upon the environment and upon human health, safety, and welfare (7 DE Admin. Code 1301 Section 1.0). Delaware House Joint Resolution 10 (HJR-10) directed the Department of Transportation (DelDOT) to work with the Delaware Solid Waste Authority (DSWA) to produce a report by September 30, 2020, that compared the financial and environmental impacts to Delaware of the current, uncoordinated trash collection system in New Castle County to the impacts of a coordinated system with 1 vendor collecting all of the trash and recycling in an entire neighborhood. The activities associated with the proposed Port of Wilmington Edgemoor expansion project are not in violation of HJR-10.

8. Comment Subject: The proposed project will create traffic flow and volume problems

The lead state agency overseeing traffic flow and volume in the state is DelDOT. As such, DelDOT staff responded to the following specific comments and questions that pertain to this topic area:

- a. Will there be any traffic studies related to the project?

DelDOT recently received from its consultant, Century Engineering, a draft Traffic Operational Analysis (TOA). DelDOT anticipates making the final TOA public later this year.

- b. Are there upgrades to I-95 Exit 9 planned in anticipation of increased traffic due to the proposed port?

No. The TOA did not examine intersections west of Governor Printz Boulevard. DelDOT predicts that 18% of the port staff and none of the truck traffic would use Edgemoor Road west of Governor Printz Boulevard.

- c. Is there anything to keep truck traffic off residential roads such as Edgemoor and Marsh Roads?

Edgemoor Road and Marsh Road are part of the State maintenance system and are open to the traveling public, which includes trucks. However, DelDOT's understanding of the port's planned operations is that the drivers serving the port have no incentive to use those roads.

- d. Where will trucks go when I-495 is closed or has traffic jams?

DelDOT anticipates that the drivers serving the port would adapt their schedules to account for partial closures and recurring congestion (peak hour traffic jams) and would stay on I-495. In the event of a longer-term closure, such as occurred when the Christina River Bridge failed in 2014, DelDOT would develop detour routes in response to the specific problem causing the closure.

- e. What is anticipated increase in truck traffic on 202 and 141?

DelDOT does not expect truck traffic to increase on U.S. Route 202 or Delaware Route 141 as a result of the proposed port expansion.

- 9. Comment Subject: The proposed project will result in a loss of recreational fishing and crabbing.

The location of this project on the Delaware River is a known habitat of the Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*), two species that are listed as endangered under the Endangered Species Act (ESA). In order to minimize impacts to sturgeon and other commercially and recreationally valuable species during their spawning periods, DNREC requires that no in-water work occurs from March 15th through June 30th. This "time-of-year restriction" will be observed for all in-water work including, but not limited to, pile driving, construction, installation of temporary bulkhead wall and sheet pile walls, and

all dredging including maintenance dredging. In addition, DNREC requires a soft start on all pile driving activities.

Cherry Island Flats is an important fish habitat and one of the major striped bass spawning areas of the Delaware River. Due to the proximity of the project to Cherry Island flats, DNREC also requires in-situ turbidity monitoring of the flats be conducted during dredging activities associated with the construction of the port to ensure that the activity is not adversely impacting sensitive species.

If granting a permit will result in loss of a substantial resource to the public, DNREC has the authority to require a permittee to take measures which will offset or mitigate the loss (7 Del.C. §7205, 7 DE Admin. Code 7504 subsection 3.4). As such, DNREC has required the applicant to mitigate for the loss of 5.5 acres of subaqueous lands. The applicant submitted a state mitigation plan which includes the creation of approximately 1 acre of intertidal wetland at the north end of FPSP, an expanded environmental DNA (eDNA) monitoring program in the Delaware River and other strategic locations within the basin before, during and after dredging/construction activities, and a FPSP enhancement plan involving landscaping and other upland improvements. The eDNA program will enable monitoring for the presence of endangered species, as well as other species of concern, without the need for actual collection of specimens.

In addition to the State-required compensatory mitigation that includes the habitat and recreational enhancements at FPSP, DSPC is also proposing a habitat improvement project at Brandywine Creek State Park on Adams Dam Road in Wilmington, Delaware as part of their federal compensatory mitigation requirements. As currently proposed, this habitat improvement project consists of the construction of a rock-ramp fish passage structure at Dam #2 on Brandywine Creek, which has the intended purpose of allowing American shad, hickory shad, and other anadromous fish species to migrate further upstream to spawn. This will result in increased opportunities for recreational angling along the banks of the Brandywine between Dam #2 and Dam #4. The proposed federal mitigation at Brandywine Dam #2 is in addition to the mitigation DNREC requires to meet the state's permitting criteria.

The proposed compensatory mitigation package, including the habitat restoration/creation work at FPSP and the enhanced eDNA monitoring are considered adequate mitigation pursuant to Subaqueous Lands Regulation Sections 4.7.1.4 and 4.7.4 (7 DE Admin. Code 7504).

10. Comment Subject: There are concerns regarding sediment and contaminants such as PCBs

DWHS Corrective Action Section (CAS) has been managing/overseeing the environmental cleanup of the upland portion of the former DuPont/Chemours Edgemoor site, where the new port will be constructed, in accordance with the federal RCRA program. CAS indicates that PCBs were a byproduct of facility production, and as a result were detected at several soil sample locations during site assessment activities related to decommissioning of the former DuPont/Chemours Edgemoor plant. However, the concentrations of PCBs present in site soils

were determined to pose no unacceptable risk to human or ecological receptors in the Risk Assessment. From an engineering control and best management practice (BMP) standpoint, surface runoff from the site was sufficiently managed. In addition, a wastewater treatment plant controlled the quality of operational wastewater that was discharged to the river under a NPDES permit. Therefore, it is unlikely that substantial PCBs have been transported to the Delaware River from the plant property in the recent past.

From a proposed future land use perspective, the preliminary construction plans, the proposed remedy in the Statement of Basis, and a proposed Corrective Measures Implementation permit all provide for the minimization of future impacts to river sediments resulting from port construction or subsequent operation.

The majority of the PCBs that were inadvertently produced at the site were concentrated in process sludges that were dried and landfilled at a downriver location. It was shown through multiple environmental studies that contaminants, including PCBs, had been released to the Delaware Estuary and the Shellpot Creek from the former sludge landfill through air transport and storm water runoff.

In February 2009, a Final Plan of Remedial Action was issued by DNREC's [then] Site Investigation and Restoration Branch for the 22-acre landfill site that required the construction of an engineered capping system and vegetative cover to control runoff, placement of a deed restriction to limit site use, and an operation and maintenance plan to ensure the long-term integrity of the remedy. Construction of the cap eliminated further transport of the material to the estuary.

Sampling of sediment from the Delaware River adjacent to the former DuPont Edgemoor facility during previous environmental investigations, and more recently within the proposed area of dredging associated with port expansion, has confirmed the presence of contaminants, including PCBs in the upper layers of sediment. Removal of the mass of contaminated sediment through dredging represents a net benefit to the aquatic ecosystem, including to endangered sturgeon that use this part of the river for spawning, as well as to other species that have been impacted by PCBs.

Critical to long term protection and improvement of human and ecological health from contaminants in the sediment will be proper management of the dredged material and associated CDF elutriate generated during dredging for port construction. A Monitoring Plan for Construction Dredging and Dredged Slurry has been developed by DSPC and approved by DNREC and USACE.

The RCRA remedial actions, detailed sediment characterization, removal of the contaminated sediments during the dredging, associated risk assessment, and proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the potential contaminated sediment transport in regard to Subaqueous Lands Regulation Sections 4.7.1.1, 4.7.1.6 and 4.7.2 (7 DE Admin. Code 7504).

11. Comment Subject: A hydrogeologic site investigation is needed

A comprehensive hydrogeologic site investigation was performed as part of the RCRA Facility Investigation (RFI). The RFI identified 29 solid waste management units (SWMUs) across the site. These were areas where environmental impacts from facility operations were known to have or potentially could have occurred.

A thorough environmental investigation was conducted at the site, which involved: the installation of numerous soil borings to characterize subsurface soil impacts, installation of three lines of monitoring wells to characterize site groundwater, completion of pump tests to determine hydraulic conductivity and connectivity across the site, and collection of numerous media samples (soil, sediment, groundwater, surface water, sludge, etc.) for laboratory analysis for contaminants of concern (COCs).

In general, the results of the RFI indicated low levels of COCs in shallow subsurface soils and perched groundwater that were consistent with the industrial activities at the site.

The hydrogeologic site investigation and associated risk assessments indicated that the levels of contaminants posed little threat to site groundwater as both a dissolved-phase source and ongoing adsorbed phase source of contamination. The site is underlain by a thick section of Potomac Formation clay which acts as a local aquitard (impediment to vertical movement of groundwater). Additionally, shallow groundwater underlying the site is primarily perched atop this clay and confined to intermittent sandy zones which are “lenticular and hydraulically disconnected from each other and the Delaware River.”

The RFI report and other supporting documents can be found here: <https://dnrec.alpha.delaware.gov/events/joint-public-hearing-diamond-state-port-corporation/>

The RCRA remedial actions, the detailed site characterization, sediment characterization, removal of the contaminated sediments during the dredging, associated risk assessment, and proposed monitoring and responsive corrective actions address the significant portions of concern DNREC had regarding the cumulative and secondary effects on the aquatic ecosystem, natural surface and groundwater hydrology in regard to Subaqueous Lands Regulation Sections 4.7.3 (7 DE Admin. Code 7504).

12. Comment Subject: Incomplete/Insufficient navigational studies, particularly for emergency scenarios

The application includes a report by the Maritime Institute of Technology and Graduate Studies (MITAGS) that assesses typical expected navigational scenarios and, appears to reasonably, conclude that “*The simulation results indicated the proposed Edgemoor Terminal would have minimal impact on ships as they transit the existing navigation channel.*”

DNREC received public comments that alleged that the proposed turning basin would negatively impact navigation of vessels on the main channel and that there would be impacts to shipping that may occur in non-typical emergency scenarios (i.e., ships losing power while turning). These concerns were passed on to the applicant to be addressed.

In response, the consultant for the applicant, Duffield Associates, provided additional information to DNREC on March 4, 2021. This additional information included a letter from David K. Cuff, President of The Pilots' Association for the Bay & River Delaware (Pilots' Association) to Mr. Eugene Bailey, Executive Director of the Diamond State Port Corporation. The Pilots' Association reviewed the Navigation Feasibility Study for the Port of Wilmington Edgemoor Expansion project produced by the MITAGS. The Pilots' Association's letter concurred with the above-cited statement in the MITAGS report that the proposed Edgemoor Terminal would have minimal impacts on ships traveling on the existing navigation channel.

DNREC sought input from the USCG on this concern. DNREC coordinated with Lieutenant Commander Andrew Cooke, USCG Sector Delaware Bay, to receive input from USCG on the navigational components of this proposed project. On September 17, 2021, USCG Sector Delaware Bay stated that it does not see this project posing a risk to safe navigation.

The proposed plans meet all appropriate setback and siting criteria pursuant to Subaqueous Lands Regulation Sections 4.9 (7 DE Admin. Code 7504). Additionally, the input that was received from the Pilots' Association for the Bay & River Delaware and the USCG have also adequately addressed the expressed navigational concerns pursuant to Subaqueous Lands Regulation Sections 4.8.4 (7 DE Admin. Code 7504).

13. Comments in Support of Proposed Project

DNREC received numerous comments in support of the proposed project from a variety of individuals and groups including but not limited to: the Delaware Building and Construction Trades Council; the International Longshoremen's Association; Labor, Economics, Education, EmPowerment (LEEP); Wilmington City Council President Hanifa Shabazz; Wilmington Mayor Michael Purzycki; State Senators John J. Walsh III, Nicole Poore and Colin Bonini; and State Representatives Kimberly Williams, Lyndon Yearick, Michael Smith, Edward Osienki and Sean Matthews.

Benefits of the proposed project include the creation of an employment hub that will provide approximately 1,000 new jobs for area residents. The project will help fill the void created by the jobs lost with the closure of area manufacturing plants. These new job opportunities will offset unemployment in Wilmington and Northern New Castle County. Many of these jobs will provide work for local, highly skilled tradesmen and craftsmen. The project will save current jobs for skilled tradesmen and craftsmen and create new jobs for this same category of skilled workers. The proposed project will also provide jobs for blue-collar laborers. In addition to the jobs created directly for dock work, jobs will also be created for the building trades, trucking industry and other support industries throughout the community. These jobs, and the community revitalization they will support, can help address local issues of unemployment and poverty.

The proposed project will also address legacy environmental issues related to the site's previous industrial uses. Construction of the new port would result in a clean, environmentally friendly business on a currently inactive parcel of land previously used for heavy industry.

This project would help revitalize the shipping industry in Delaware. Delaware would be able to accept the larger vessels coming to the east coast as a result of the expansion of the Panama Canal and the Suez Canal. The new port would allow Delaware to accept the larger container ships that are being more widely used to transport cargo. This will allow Delaware to compete regionally and nationally, and to keep up with the evolving needs of the shipping industry.

CONCLUSION

Our review of the information provided by the applicant in both the original application and subsequent submittals in response to the public comments received and DNREC's inquiries, provides adequate justification and detail to support the project. Additionally, DNREC obtained independent confirmation from external agencies (e.g., DeIDOT, USCG) where needed to evaluate the concerns expressed beyond our typical regulatory purview. This comprehensive review has provided sufficient detail and assurances to support the issuance of appropriately conditioned RCRA Permit modifications, Subaqueous Lands Permit, and federal consistency certification, as attached.



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

DIVISION OF WATER
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

**WETLANDS &
SUBAQUEOUS LANDS**

PHONE
(302) 739-9943

Diamond State Port Corporation
Port of Wilmington
C/o: Eugene R. Bailey, Executive Director
820 N. French Street, 4th Floor
Wilmington, DE 19801
Tax Parcel: 0615300006

Subaqueous Lands Permit: SP-101/20
Date of Issuance: 9/29/2021
Construction Expiration Date: 9/29/2026
Amended Date: N/A

SUBAQUEOUS LANDS PERMIT

GRANTED TO:

Diamond Sate Port Corporation

FOR THE FOLLOWING ACTIVITIES:

To construct a new shipping container port facility on the Delaware River. Initial construction activities include:

- **To remove all existing in-water structures, consisting of three (3) piers, pilings, water intake structure and portions of seawall**
- **To install 3,200 linear feet of new bulkhead, and to place approximately 20,107 cubic yards of backfill material**
- **To construct a 112-foot wide by 2,600-foot-long concrete wharf structure along the new bulkhead, resulting in the loss of approximately 5.5 acres of subaqueous lands**
- **To conduct new hydraulic dredging in an area approximately 4,000 feet in length, extending to the boundary of the federal navigation channel, removing approximately 3.3 million cubic yards of material, to a depth of -45 feet below mean low water to create a shipping access channel and berthing area**
- **To place up to 500,000 cubic yards of dredged material in an upland, onsite beneficial reuse area, and to dispose of the remaining dredged material at the Wilmington Harbor North and/or Wilmington Harbor South confined disposal facilities located in Edgemoor, New Castle County, Delaware**

LOCATED:

**In the Delaware River,
At the new Edgemoor Container Port,
4600 Hay Road,
Edgemoor, New Castle County, Delaware**

Pursuant to the provisions of 7 Del. C., §7205, and the Department's Regulations Governing the Use of Subaqueous Lands, permission is hereby granted on this 29th day of September, 2021, to conduct the above-referenced activities in accordance with the approved plans (18 sheets), as approved on September 29, 2021; and the application dated March 10, 2020, and received by this Division on March 13, 2020, and with subsequent information received on March 16, 2020, June 11, 2020, June 19, 2020, March 4, 2021, July 1, 2021, and September 24, 2021.

WHEREAS, Diamond State Port Corporation, has applied for permission to conduct the above-referenced activities to construct a new shipping container port facility; and

WHEREAS, pursuant to the provisions of 7 Del. C., §7203, the Secretary of the Department of Natural Resources and Environmental Control through his duly authorized representative finds that it is not contrary to the public interest if this project is approved subject to the terms and conditions herein set forth.

NOW THEREFORE, this Permit is issued subject to the attached Subaqueous Lands Permit General Conditions and the following Special Conditions:

SPECIAL CONDITIONS:

1. This approval is in accordance with the plans and application submitted to the Department of Natural Resources and Environmental Control, a copy of which is attached hereto and made a part hereof.
2. This Permit is granted for the purpose of constructing a new shipping container port facility on the Delaware River. Any other use without prior approval shall constitute reason for this Permit being revoked.
3. In order to protect Atlantic Sturgeon (*Acipenser oxyrinchus*) and Shortnose Sturgeon (*Acipenser brevirostrum*), no in-water work shall occur from March 15th through June 30th of any year.
4. This Permit authorizes the depths below mean low water as specified on page 1, with an allowable, maximum 3-foot over-dredge.
5. Disposal areas shall be inspected prior to dredging and effectively maintained in a manner that prevents the entrance of the dredged material into any surface water or wetland.
6. All dredging activities, including the disposal of materials into any and/or all of the three disposal facilities as well as Cherry Island Flats shall be monitored in accordance with the attached DNREC-approved *Monitoring Plan for Construction Dredging and Dredged Slurry – Port of Wilmington Edgemoor Expansion* dated August 2021. Any observed activities or measured water quality parameters that are likely to result in or do result in exceedances of applicable Surface Water Quality Standards, shall be addressed in accordance with section 6.2 *Corrective Action* in the above-referenced plan.
7. Total suspended solids (TSS) in surface water shall be maintained at a maximum of 250 mg/l at a distance 200 feet down current from the cutterhead during active dredging activities. As a means of real-time monitoring, turbidity readings in nephelometric turbidity units (NTU) shall be collected on a continuous basis during active dredging activities. A turbidity reading of 170 NTU or less is expected to meet the 250 mg/L TSS water quality performance standard. Exceedances

of this permit condition shall be addressed in accordance with section 6.2 *Corrective Action* in the DNREC approved monitoring plan.

8. Total suspended solids (TSS) in surface water shall be maintained at an average concentration less than 3,000 mg/L (with an instantaneous maximum concentration of 4,000 mg/l) at any and/or all three CDF effluent discharge points. As a means of real-time monitoring, turbidity readings in NTU shall be collected on a continuous basis during active effluent discharge periods. A turbidity reading less than 1,700 NTU (with an instantaneous maximum reading of 2,200 NTU) is expected to meet the TSS water quality performance standard. Exceedances of this permit condition shall be addressed in accordance with section 6.2 *Corrective Action* in the DNREC approved monitoring plan.
9. The Wetlands and Subaqueous Lands Section (WSLS) shall be notified within 24 hours of any monitoring events where the turbidity levels exceeded the NTU limits specified in Conditions 7 and 8 above.
10. All dredging and disposal shall be conducted in a manner consistent with sound conservation and water pollution control practices.
11. All dredging and construction activities shall be performed in a manner that minimizes impacts to navigation.
12. A post-dredging bathymetric survey of the dredged area, showing depths relative to mean low water, shall be submitted to DNREC WSLS in both digital and plan form within 60 days of the completion of the dredging.
13. There shall be no movement of equipment within subaqueous lands not specifically authorized by this Permit. Any such areas disturbed shall be returned to preconstruction conditions/elevations and appropriately stabilized.
14. Compensatory mitigation for the loss of 5.5 acres of public subaqueous lands shall be provided in accordance with the attached DNREC-approved *Port of Wilmington – Edgemoor Expansion State of Delaware Compensatory Mitigation Plan* dated September 24, 2021. Final construction plans for both the State-required mitigation and the Federally-required mitigation shall be submitted to DNREC WSLS for review and approval prior to construction.
15. DNREC WSLS shall be provided with a copy of all status and/or monitoring reports generated and submitted to the US Army Corps of Engineers (USACE) and/or other federal agencies associated with any approved Federal Compensatory Mitigation Plan for this project.
16. Erosion and sediment control measures shall be implemented in accordance with the specifications and criteria in the current Delaware Erosion and Sediment Control Handbook, and any New Castle County-required erosion and sediment control practices to minimize entry and dispersal of sediment and other contaminants in surface waters.
17. The work authorized by this Permit is subject to the terms and conditions of all appropriate USACE authorization.

IN WITNESS WHEREOF, I, Steven M. Smailer, the duly authorized representative of Shawn M. Garvin, Secretary, Department of Natural Resources and Environmental Control, have hereunto set my hand this 29th day of September 2021.

By Steven M. Smailer, Environmental Program Administrator
Division of Water

Katie Esposito, Environmental Scientist
Wetlands and Subaqueous Lands Section



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF WATER
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

WETLANDS &
SUBAQUEOUS LANDS

PHONE
(302) 739-9943

**SUBAQUEOUS LANDS PERMIT
CONTRACTOR'S COMPLETION REPORT
POST-CONSTRUCTION**

Subaqueous Lands Permit Number: SP-101/20

Name: Diamond State Port Corporation

Project Address: 4600 Hay Road,
Edgemoor, New Castle County, DE

Tax Parcel: 0615300006

I hereby certify that I have constructed the project authorized by the above-referenced Subaqueous Lands Permit in accordance with the approved plans for the project.

Printed Name of Contractor

Name of Company

Contractor's Signature

Date

Telephone Number

Upon completion of construction, this form shall be completed, signed by the contractor, and mailed to the Wetlands and Subaqueous Lands Section at:

**DNREC
Wetlands and Subaqueous Lands Section
89 Kings Highway
Dover, Delaware 19901**

Or faxed to the Wetlands and Subaqueous Lands Section at: **302-739-6304**

This form must be received by the Department within ten days of the date that construction is completed.

For official use only

Compliance inspection date _____ *Built in accordance with plans* *Yes* *No*

Scientist: Katie Esposito

Affix
Proper
Postage
Here

Mail to:
DNREC – Wetlands and Subaqueous Lands Section
89 Kings Highway
Dover, DE 19901

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WETLANDS AND SUBAQUEOUS LANDS SECTION

PERMIT NO.: SP-101/20

CONSTRUCTION EXPIRATION DATE: 9/29/2026

TO CONDUCT THE FOLLOWING ACTIVITIES:

To construct a new shipping container port facility on the Delaware River. Initial construction activities include:

- **To remove all existing in-water structures, consisting of two (2) piers and pilings**
- **To install 3,200 linear feet of new bulkhead, and to place approximately 20,107 cubic yards of backfill material**
- **To construct a 112 foot wide by 2,600 foot long concrete wharf structure along the new bulkhead**
- **To conduct new hydraulic dredging in an area approximately 4,000 feet in length, extending to the to the boundary of the federal navigation channel (87 acres), removing approximately 3.3 million cubic yards of material, to a depth of 45 feet below mean low water to create a shipping access channel and berthing area**
- **To place up to 500,000 cubic yards of dredged material in an upland, onsite beneficial reuse area, and to dispose of the remaining dredged material at the Wilmington Harbor North and/or Wilmington Harbor South confined disposal facilities located in Wilmington, New Castle County, Delaware**

LOCATED:

**In the Delaware River,
At the Edgemoor Container Port,
4600 Hay Road,
Edgemoor, New Castle County, Delaware**

ISSUED TO: Diamond State Port Corporation

LOCATION OF WORK: Same as above

**DISPLAY THIS CERTIFICATE IN A HIGHLY
VISIBLE LOCATION ON THE JOB SITE.**

Authorized by: _____



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

OFFICE OF THE
SECRETARY

PHONE
(302) 739-9000

September 29, 2021

Mr. Eugene R. Bailey
Executive Director
Diamond State Port Corporation
820 N. French Street, 4th Floor
Wilmington, DE 19801

RE: Delaware Coastal Management Program — Federal Consistency Certification for Port of Wilmington Edgemoor (FC 2020.0043)

Dear Mr. Bailey:

The Delaware Department of Natural Resources and Environmental Control (DNREC), through the Delaware Coastal Management Program (DCMP), has completed its review of the above referenced project. This letter is in response to the federal consistency certification dated and received on March 18, 2020, submitted by you on behalf of Diamond State Port Corporation (DSPC). The review period was extended to six months on June 10, 2020. Additionally, the DCMP and DSPC entered a stay agreement for a period of 6 months, from August 3, 2020 to February 3, 2021, bringing the end of the review period to March 18, 2021. The DCMP and DSPC entered a second stay agreement for a period of one year, from February 26, 2021 to February 26, 2022, bringing the end of the review period to March 18, 2022.

PROPOSED ACTION

DSPC proposes to construct a new shipping container port facility on the Delaware River at DSPC's Edgemoor property, 4600 Hay Road, Edgemoor, New Castle County, DE 19809, Tax Parcel ID 0615300006 and 0615300003. This project would include the removal of existing in-water structures; the construction of an approximately 2,600-foot-long, pile-supported concrete wharf structure; new hydraulic dredging to remove approximately 3.3 million cubic yards of river sediments and underlying soil; excavating the berth and access channel to a depth of -45feet mean low water; and bulkheading 3,200 linear feet of shoreline. Dredged materials would be stored at the Wilmington Harbor North and/or Wilmington Harbor South confined disposal facilities (CDFs) and a portion of the dredged materials would be used as fill. The use of shoaling fans, proposed in the original application materials, was removed from the scope of the proposed activities after consultation with the applicant.

FEDERAL CONSISTENCY WITH STATE COASTAL MANAGEMENT PROGRAMS

Pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended, any applicant for a required federal license or permit to conduct an activity, in or outside of the coastal zone, that can have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone of that state, shall provide a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. The National Oceanic and Atmospheric Administration (NOAA) is required to review and approve a proposed state management program for it to become effective. Under the CZMA implementing regulations, Federal Consistency with Approved Coastal Management Programs (15 CFR 930), subpart D, state agencies are directed to develop a list of federal license or permit activities to be included as part of the management program, with the federal license or permit activities described in terms of the specific licenses or permits involved. Any applicant for a federal license or permit selected for review by a state agency should obtain the views and assistance of the state agency regarding the means for ensuring that the proposed activity will be conducted in a manner consistent with the management program.

During the period when the state agency is reviewing the consistency certification, the applicant and the state agency should attempt, if necessary, to agree upon conditions, which, if met by the applicant, would permit state agency concurrence.

PUBLIC PARTICIPATION

In accordance with 15 CFR §930.61, the public was invited to participate in the review of the Port of Wilmington Edgemoor expansion project. On August 23, 2020, DNREC published a joint public notice in the Delaware State News, The Wilmington News Journal, and the DNREC public notices list service that included the federal consistency certification received from DSPC and notice of a joint public hearing to be held by DNREC on September 29, 2020. The public comment period was originally scheduled to close on November 1, 2020, which represents a 71-day comment period. On October 30, 2020, at the request of members of the public, DNREC extended the public comment period to December 1, 2020, which represents a 101-day comment period.

During the public comment period DNREC received 196 comments, 3 of which were submitted live during the September 29, 2020 public hearing, 193 of which were submitted in writing before or after the public hearing.

DNREC received comments of opposition and support. Comments opposing the proposed structure included the following topics of concern: homeland security, impacts of the proposed shoaling fans, community engagement and transparency, public health/environmental justice, violation of House Joint Resolution Ten (HJR-10), fishing/crabbing, natural resources, air quality, navigational concerns, and water quality. Comments in favor of the proposed project noted the benefit to Delaware from building a port of call for larger container ships, job creation and economic development, and the cleanup and redevelopment of a currently inactive parcel.

At the request of the Hearing Officer, DNREC generated a Technical Response Memorandum (TRM) to address comments and questions submitted to DNREC during the project's public comment period, from August 23, 2020 to December 1, 2020 (see DNREC Public Hearing Docket #2020-P-Multi-0024).

FEDERAL CONSISTENCY ANALYSIS

The DCMP coordinates the review of consistency certifications with agencies administering the enforceable and advisory policies of the program. The following agencies participated in this review:

- DNREC, Division of Air Quality (DAQ)
- DNREC, Division of Fish and Wildlife (DFW)
- DNREC, Division of Waste and Hazardous Substances (DWHS)
- DNREC, Division of Water (DW)
- DNREC, Division of Watershed Stewardship (DWS)
- Department of Transportation (DelDOT)
- Department of State, State Historic Preservation Office (SHPO)

The location of this project on the Delaware River is known habitat of the Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*), two species that are listed as endangered under the Endangered Species Act (ESA). In order to minimize impacts to sturgeon and other commercially and recreationally valuable species during their spawning periods, DNREC requires that no in-water work occurs from March 15th through June 30th. This time-of-year restriction will be observed for all in-water work including, but not limited to, pile driving, construction, installation of temporary bulkhead wall and sheet pile walls, and all dredging including maintenance dredging. In addition, DNREC requires a soft start on all pile driving activities. (7 DE Admin. Code 2201, subsections 5.11.2.1, 5.11.3.2)

Cherry Island Flats is an important fish habitat and one of the major striped bass spawning areas of the Delaware River. Due to the proximity of the project to Cherry Island flats, DNREC also requires in-situ turbidity monitoring of the flats during dredging activities associated with the construction of the port to ensure that the activity is not adversely impacting sensitive species. (7 DE Admin. Code 2201, subsections 5.11.2.1, 5.11.3.2)

To ensure long term protection of human and ecological health from contaminants in the sediment, DSPC is required to properly manage the dredged material and associated CDF elutriate generated during dredging for port construction. As such, DNREC required that DSPC generate a monitoring plan for construction dredging and dredged slurry. On August 18, 2021, DNREC received a final monitoring plan from DSPC; this plan was reviewed and approved by both DNREC and the U.S. Army Corps of Engineers (USACE). (7 DE Admin. Code 2201, subsections 5.3.1.4, 5.3.1.17)

Mitigation is required by the State of Delaware for the loss of 5.5 acres of subaqueous lands. DNREC requires that the applicant implement the DNREC-approved mitigation plan which includes the creation of approximately one acre of intertidal wetland at the north end of Fox Point State Park (FPSP), an expanded environmental DNA (eDNA) monitoring program in the Delaware River and other strategic locations within the basin before, during and after dredging/construction activities, and a FPSP enhancement plan involving landscaping and other upland improvements. (7 DE Admin. Code 2201, subsection 5.4.18)

In addition to the state-required compensatory mitigation, DSPC is also proposing additional mitigation measures as part of their federal compensatory mitigation requirements. These additional mitigation measures will include habitat improvement that will benefit American shad, hickory shad, and other anadromous fish species. The proposed federal mitigation is in addition to the mitigation DNREC requires to meet the state's permitting criteria. (7 DE Admin. Code 2201, subsection 5.4.18)

Please be advised that coordination with the NOAA National Marine Fisheries Service (NMFS) should be considered for protection of endangered species. (7 DE Admin. Code 2201, subsection 5.11.3.2)

Additionally, the DCMP received input from United States Coast Guard (USCG) on the navigational components of this proposed project. On September 17, 2021, USCG Sector Delaware Bay stated that it does not see this project posing a risk to safe navigation. (7 DE Admin. Code 2201, subsection 5.4.22.3)

The proposed activity is to be implemented in a manner consistent with the enforceable policies of the DCMP under 7 DE Admin. Code 2201, Section 5.0 including but not limited to: Coastal Waters Management, Subaqueous Lands and Coastal Strip management, Port of Wilmington, Historic and Cultural Areas, Living Resources, Transportation Facilities, Air Quality Management, and Pollution Prevention (7 DE Admin. Code 2201, subsections 5.3.1.4, 5.3.1.17, 5.4.18, 5.4.22.3, 5.8.1.1, 5.8.1.3, 5.8.1.4, 5.10.1.4, 5.11.2.1, 5.11.3.2, 5.19.1.1, 5.19.2.6, 5.20.2, 5.20.2.2, 5.20.2.6, 5.20.2.8, 5.20.2.9, 5.20.2.12, 5.24.1.1).

CONDITIONAL CONCURRENCE

Based on its review, the DCMP conditionally concurs that the Port of Wilmington Edgemoor as proposed above is consistent with Delaware's enforceable policies.

To protect living resources of the state, DFW recommended a specific time of year restriction for all in-water work including, but not limited to, pile driving, construction, installation of temporary bulkhead wall and sheet pile walls, and all dredging, including maintenance dredging, as well as requiring a soft start on all pile driving activities. DFW also requires in-situ turbidity monitoring of Cherry Island Flats during dredging activities associated with the construction of the port to ensure that the activity is not adversely impacting sensitive species. DW Wetlands and Subaqueous Lands Section (WSLS) requires mitigation for the loss of subaqueous lands. Additionally, the DWS Watershed Assessment & Management Section and the DWHS Remediation Section conducted a review of the sediment analysis. On August 18, 2021, the applicant submitted a final monitoring plan for construction, dredging and dredged slurry as a condition of this concurrence.

As such, to be consistent with the DCMP's enforceable policies, the following conditions must be satisfied as they relate to the Coastal Waters Management, Subaqueous Lands and Coastal Strip Management, and Living Resources policies (7 DE Admin. Code 2201, subsections 5.3.1.17, 5.4.18, 5.11.2.1, and 5.11.3.2):

1. A time-of-year restriction from March 15th to June 30th for all in-water work including, but not limited to, pile driving, construction, installation of temporary bulkhead wall and sheet pile walls, and all dredging including maintenance dredging;
2. A soft start on all pile driving activities;
3. The initiation and implementation of the DNREC-approved monitoring plan for construction, dredging and dredged slurry, and in-situ turbidity monitoring of Cherry Island Flats, as described above;
4. The initiation and implementation of the DNREC-approved mitigation package to mitigate the loss of 5.5 acres of subaqueous lands, as described above; and
5. Submittal of the construction plans for the federally-required mitigation for review and approval prior to construction.

Failure to comply with 15 CFR §930.4 as it relates to the conditions above will result in this conditional concurrence being deemed an objection. Under this scenario, the applicant is advised that pursuant to 15 CFR part 930, subpart H, and within 30 days from receipt of this letter, a request may be submitted to the Secretary of Commerce to override this objection. In order to grant an override request, the Secretary of Commerce must find that the activity is consistent with the objectives or purposes of the CZMA or is necessary in the interest of national security. A copy of the request and supporting information must be sent to the DCMP and the federal permitting or licensing agency. The Secretary of Commerce may collect fees for administering and processing your request.

Pursuant to 15 CFR 930.66, DSPC shall notify the DCMP of any proposed modifications to activities after receiving a decision from the DCMP. Modifications will be subject to supplemental federal consistency review if effects to any coastal use or resource will be substantially different than originally described.

Please be advised that this federal consistency review does not negate the need for any other authorizations that may be required.

Thank you for the opportunity to review and respond to the Port of Wilmington Edgemoor federal consistency certification. If you have any questions, please contact me or Laura Mensch of my staff at (302) 739-9283.

Sincerely,

Shawn M. Garvin
Secretary

cc: Todd Schaible, USACE



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

DIVISION OF WATERSHED STEWARDSHIP

ENTERPRISE BUSINESS PARK
285 BEISER BOULEVARD, SUITE 102
DOVER, DELAWARE 19904

WATERSHED ASSESSMENT AND
MANAGEMENT SECTION

PHONE: (302) 739-9939
FAX: (302) 739-6140

Memorandum

To: Lisa Vest, Hearing Officer

Through: Steven Smailer, DW Program Administrator

From: John Cargill, DWS Hydrologist

Date: September 26, 2021

Subject: Components of State Compensatory Mitigation Plan for the Diamond State Port Corporation Expansion Project

Components/phases of the State of Delaware Compensatory Mitigation Plan, submitted by the Diamond State Port Corporation (DSPC) on September 24, 2021, are summarized below. Compensatory mitigation is required for the filling of 5.5 acres of subaqueous lands of the State of Delaware related to the proposed construction of a new container port at Edgemoor, Delaware.

Phase one - Intertidal Wetland Mitigation Project at Fox Point State Park. DSPC will construct approximately 1 acre of intertidal wetland located along the Delaware River at the north end of Fox Point State Park as an “in-kind” component of habitat replacement to partially compensate for what is being lost through the construction of the port. DSPC shall be responsible for all aspects of the project. This will include obtaining any necessary authorizations, construction of the wetland, and three (3) years of monitoring, maintenance and reporting to ensure that the wetland habitat creation is a success.

Phase two – Environmental DNA (eDNA) Monitoring and Research Program. To provide additional compensatory mitigation, the DSPC will provide funding to establish an Environmental DNA (eDNA) Fisheries Monitoring Program under the operation and

management of the Delaware Department of Natural Resources and Environmental Control (DNREC). The first project administered through the program will focus on monitoring around the Edgemoor expansion project area and the surrounding Christina River watershed before, during and after dredging. Fish species of interest include Atlantic Sturgeon, Shortnose Sturgeon, Striped Bass, American Shad, Blueback Herring and Alewife (collectively, river herring), Hickory Shad and American Eel. In addition, DNREC will expand their eDNA monitoring to other rivers, creeks, and ponds in the State to monitor endangered species, invasive species, and other species of interest. DSPC will fund up to \$750,000 for establishment of the DNREC eDNA Program, and for sampling/analysis associated with the projects described above for a three (3) year monitoring period. The data will help DNREC to evaluate and understand potential impacts of the proposed port expansion project on resident and transient fish species that utilize the Delaware River and will help to supplement traditional data collection methods used by DNREC fisheries managers in other water bodies throughout the state.

Phase three – Increased Public Access at Fox Point State Park to Natural Resources of the Delaware River. The DSPC will consult with DNREC to produce landscape designs for an improved walking trail around the newly created intertidal wetland, a viewing/observation platform that will facilitate associated education opportunities, and substantial vegetation removal to restore the view of the river along the length of the park. Additional enhancements under consideration include roadway and lighting improvements, restroom repairs, and other amenities aimed at increasing public access to the natural resources of the park and the Delaware River.