



To: US Army Corps of Engineers

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Re: Port of Wilmington Edgemoor Expansion– **Public Notice No. CENAP-OP-R-2019-278-23**

Date: August 28, 2020

From: Maya K. van Rossum, the Delaware Riverkeeper, on behalf of Delaware Riverkeeper Network

I would like to begin by reiterating our request that the U.S. Army Corps of Engineers (“USACE”) extend the public comment period on Public Notice No. CENAP-OP-R-2019-278-23 regarding the Proposed Edgemoor Port Expansion project a minimum of sixty (60) additional days beyond the currently scheduled public comment deadline until October 20, 2020 in order to support a full and fair opportunity for the public to comment. The Delaware Riverkeeper Network would also like to request a public hearing on this important matter.

Diamond State Port Corporation is asking the US Army Corps of Engineers and the State of Delaware to approve their new port expansion at the old Dupont Chemours Edgemoor manufacturing facility along the Delaware River in New Castle County, DE in order to create a multi-use containerized cargo port to service deep draft vessels.

The project includes dredging and deepening to create a new 45-foot-deep access channel from the main navigation channel to the port facility resulting in 3,325,000 cubic yards (cy) of dredged spoils for disposal. Maintenance dredging will result in an additional 500,000 cy of dredge spoils annually. 10% of the spoils would be used for fill onsite or other purposes, the rest would be disposed of in Army Corps confined disposal facilities (CDFs) including Wilmington Harbor North, Wilmington Harbor South, Reedy Point North and Reedy Point South.

The project includes construction of a ~2600-foot long, pile-supported wharf and steel sheet pile retaining wall (bulkhead) along the landward side of the wharf structure. Construction of the bulkhead will require the discharge of fill material into 5.5 acres of river bottom. The wharf will be supported by 4500 twenty-inch diameter steel pipe pilings filled with concrete.

The project includes installation and operation of 13 fans in the River that pose a risk to aquatic species including the impingement or entrainment of fish, eggs or larvae, and/or the blowing of sediment that threatens to smother river bottom habitats, sessile species or cause sediment plumes in the water column that could choke or displace fish. The 13 fans would be placed every 200 feet along the riverfront face of the wharf. Each fan would be used to blow sediment from approximately 160 feet of riverbed in an effort to reduce the volume of maintenance dredging required for the project. The fans will operate by drawing water into the top of a 48-inch diameter "J-shaped" tube, passed through a hydraulically powered pump impellor, that is then discharged as a jet along the bottom of the River. The fans will rotate at speeds on the order of 275 revolutions per minute. The fans will include a 4-inch screen at their larger intake end and an open space of 1.5 feet between the blades. The fans will direct the discharge jet in the direction of tidal current flow. Each fan will run 4 times a day for 30 minutes (twice during the flood tide and twice during the ebb).

Previous proposals to use similar fans were opposed by fishery experts due to the serious threat to aquatic life and were withdrawn before a final decision was made. There is particular concern about the federal endangered sturgeon of the River and Striped Bass.

The Delaware Riverkeeper Network is opposed to this port expansion project and urges it be rejected. At a minimum, critical changes are necessary, including rejecting the use of the proposed sediment fans and mandating mitigation to address the species, water quality and hardening of the riverside lands that this project will inflict.

A simple look at the dredge, construction, riparian bank hardening, landside development, and sedimentation fans proposed undermines any assertion that there will be minimal impacts that negate the need for compensatory mitigation. If this project is approved, there is no credible defense for not requiring significant and meaningful compensatory mitigation to address impacts to aquatic life, habitat and water quality. The footprint of impacts is serious, significant and will be irreparable.

The suggestion that the bank in this reach of river is already hardened and therefore proposed rip rap etc. will not have an adverse environmental consequence is wrong headed. The absence of an ongoing use at this site is an opportunity to restore the riverbank and riverside lands to an ecologically healthy - or at least an ecologically more beneficial - state thereby providing ecological benefits to aquatic life, water quality, and enhanced benefits to recreational users. The proposed bank hardening strategies will lock in the ecologically harmful state of the river bank and parcel at this location; that is an adverse environmental consequence that needs to be considered and mitigated.

The project includes installation and operation of 13 fans for blowing sediment that pose a risk to aquatic life and water quality. Fishery experts, and the Delaware Riverkeeper Network are tremendously concerned about the sediment plume blown out by the fans smothering river bottom habitats, potentially smothering sessile critters laying on the river floor, impinging fish, eggs or larvae on the intake screens or entraining (cutting up) fish, eggs and larvae that will be drawn into and through the fans and their blades. There are also concerns about the impact of the sediment plume on fish and water quality - potential choking from the plume of sediment or forcing fish to redirect their movements in reaction to the plume in ways that could impact them. These issues have not been properly addressed let alone considered.

- The sediment will be blown downriver creating a huge turbidity curtain and slurry of sediment. There is risk and concern that when anadromous or resident fish meet the sediment

plume/slurry they may either get choked and/or get chased out of the area. Both will have negative impacts on the impacted fish.

- The sediment blown into the water column and downstream will include legacy sediments burdened with contaminants such as heavy metals, PCBs, Benzo[a]pyrene, arsenic, vanadium and more and will re-introduce those contaminants into the water column and downstream habitats.
- The blown sediment plume could, according to fishery experts, cover downstream habitat or smother sessile aquatic life – in both instances inflicting concerning environmental harm and impact.
- In addition, a variety of species, including eggs, larvae, young and adult striped bass, Atlantic Sturgeon, and other species will most certainly become impinged and entrained by the sediment fans resulting in damage and premature mortality.

It is notable that an internet search for sedimentation fans, to learn where else they have been used and what has been the experience for aquatic life and water quality, as well as their success in reducing the need for maintenance dredging, yielded no meaningful results. Even Army Corps documents regarding reducing shoaling do not explore this sedimentation fan option. As a result, it seems clear that this is a little used or known technology in any River and certainly in the Delaware River, and that the Diamond State Port Corporation, the State of Delaware, and the US Army Corps of Engineers are seeking to use our River and our aquatic life as the guinea pigs for what is clearly, on its face, a dangerous technology that could have serious and irreparable harms, particularly on our genetically unique population of endangered Atlantic Sturgeon. In addition, given that our River and this project would be a testing ground for this kind of technology, one would expect an assessment of a “plan B” should the fans and their supposed impact for reducing the need for maintenance dredging fail – what would be the ramification for increased dredging operations, increased spoil disposal needs, increased ecological and economic impacts? None of that is assessed and yet the failure of such a technology is imminently foreseeable and should be evaluated and assessed.

The blanket assertion that this reach of river has no value for fish and aquatic life is a sweeping statement that does not square with the science, facts or conversations with fishery experts. Delving into that assertion is among the reasons more than 30 days is needed – to ensure agencies, experts and organizations like mine can vet that blanket statement that does not square with the findings of other experts working on aquatic life issues. In addition, the assertion that removal of the shallow water shelf will have no impact also raises questions – often areas like that are important to aquatic life, providing safe havens, little known resting, feeding, or other areas of importance to aquatic life. This assertion that there are no ramifications to the removal of a unique in river feature like this needs investigation and verification by objective experts. Further, the assertion that there will be no meaningful impact on aquatic life is contradicted later in the Corps’ notice: “A preliminary review of this application indicates that the proposed work may affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA) as amended.” Furthermore, this reach of river is identified as critical habitat for the federally endangered Atlantic Sturgeon, again, contradicting the assertion that there are no aquatic life or fish impacts of concern or importance.

Bringing in deeper draft vessels will result in increased fish strikes, and death, for species like the federal endangered Atlantic Sturgeon. The Delaware River’s population of Atlantic Sturgeon is

genetically unique with only 300 spawning adults left. Increasing fish strike mortality is a significant impact that must be part of any impacts (including cumulative impacts) analysis for this project and yet there is no mention of this impact in the notice provided.

The proposed Port of Wilmington Edgemoor Expansion project will have significant and foreseeable coastal effects on New Jersey and Pennsylvania as well as Delaware. It could have significant water quality ramifications depending on the dredging operations and the final disposal of dredge spoils that will impact the estuary region. It will have serious implications for a variety of species including eels, shad, striped bass and sturgeon that are ecologically, and in some cases economically, important to our River and region. The proposed fans are not common technology for our River and when proposed for projects in the past have been soundly opposed by a variety of voices.

In addition, this is a very controversial issue with members of congress in New Jersey and Pennsylvania already expressing concerns about the project benefitting from reduced oversight due to pending federal legislation.

Providing only 30 days to comment during the pandemic and the month of August undermines the ability of the public to fully and fairly review and engage. We ask for an additional 60 days to comment as well as a public hearing on this impactful and controversial issue.

Respectfully submitted,



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the Delaware Riverkeeper