FRESHWATER WETLANDS, FLOOD HAZARD AREA, & WATERFRONT DEVELOPMENT INDIVIDUAL PERMIT APPLICATIONS

Tab Number	**Permit Application Requirement**
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	Site Plans [Folded and enclosed separately]
VOLUME III	Identification of Management Options for Dredged Sediments (Appendix F of Compliance Statement)
VOLUME IV	Stormwater Management Report (Appendix G of Compliance Statement)

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New York, New York

Prepared By:
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Date
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Project Number
02-35702A

COMPLIANCE STATEMENT IN SUPPORT OF MULTIPLE INDIVIDUAL PERMIT APPLICATIONS

DRP GIBBSTOWN LOGISTICS CENTER

GIBBSTOWN, GLOUCESTER COUNTY, NEW JERSEY

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ACRONYMS AND ABBREVIATIONS

ASGECI	Amy S. Greene Environmental Consultants, Inc.
BMP	Best Management Practices
CZM	Coastal Zone Management
DRP	Delaware River Partners, LLC
EFH	Essential Fish Habitat
FGL	Flagler Global Logistics, LLC
FHA	Flood Hazard Area
FHACA	Flood Hazard Area Control Act
FWPA	Freshwater Wetlands Protection Act
GIS	Geographic Information System
GP	General Permit
HSD	Habitat Suitability Determination
HUC	Hydrologic Unit Code
LOI	Letter of Interpretation
LSRP	Licensed Site Remediation Professional
MHHW	Mean Higher High Water
MHW	Mean High Water
MLLW	Mean Low Low Water
MRPA	Magothy-Raritan-Potomac Aquifer
NAVD88	North American Vertical Datum of 1988
NJDEP	New Jersey Department of Environmental Protection
NJPDES	New Jersey Pollutant Discharge Elimination System
NMFS	National Marine Fisheries Service
OHWM	Ordinary High Water Mark
PCB	Polychlorinated Biphenols
PMDA	Pyromellitic dianhydride
PSI	Pounds per square inch
SAV	Submerged Aquatic Vegetation
SCD	Soil Conservation District
SESC	Soil Erosion and Sediment Control
SPLP	Synthetic Precipitation Leachate Procedure

SRS	Soil Reme	andard
T&E	Threatene	dangered
TAW	Tr sition	raging Waiver
USGS	Unite Sta	gical Survey
WB	Upper Wet	ndary

1. EXECUTIVE SUMMARY

On behalf of the applicant, Delaware River Partners (DRP), Ramboll Environ US Corporation ("Ramboll Environ") has prepared this compliance statement to support multiple individual permit applications for the development of the DRP Gibbstown Logistics Center, a multi-use deep water seaport and international logistics center on a portion of the former Dupont Repauno Property in Gibbstown, New Jersey that is referred to herein as the "Project Site"[1]. The development will occur within an approximately 381-acre area. Approximately 233 acres of the Project Site is proposed to be developed into a multi-use terminal including an automobile import and processing facility, perishables and bulk cargo handling, a bulk liquids storage and handling facility, logistics and associated warehousing. Development activities include filling and grading of the marine terminal area, construction of marine terminal buildings, and demolition and dredging work within the proposed multi-purpose berth.

The Marine Terminal development is in response to demonstrated need for expanded Port capacity in the Delaware River region. Under existing conditions, ports in the South Jersey/Southeastern Philadelphia Region are operating at near maximum capacity, with ships being turned away in 2006 and 2007 due to lack of available berth space to handle additional ships and cargo. The redevelopment of the Project Site into an intermodal port facility would address a portion of the need for additional berths in the Delaware River Region by utilizing existing infrastructure located in a previously disturbed industrial setting, which reduces environmental impacts as much as possible while revitalizing a longstanding brownfields site.

As an intermodal port facility, the project is water-dependent and relies on access to the Delaware River and its waterfront for daily operations. The location of the Marine Terminal along the waterfront results in some impacts to wetlands and coastal areas. Through the design and location of the proposed development, these impacts have been minimized to the greatest extent practicable.

This compliance statement has been prepared to support the following individual permit applications:

- Freshwater Wetlands Individual Permit
- Coastal Wetlands Individual Permit
- Waterfront Development Individual Permit
- Flood Hazard Area Individual Permit.

This compliance statement demonstrates compliance with applicable requirements of the Coastal Zone Management Rules (N.J.A.C. 7:7), Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A); and Flood Hazard Area Control Act Rules (N.J.A.C. 7:13).

Based on the findings of this review, the project is in compliance with the applicable requirements of these rules. In some cases, mitigation is required to demonstrate

[1] The entire property currently owned by DRP is referred to as the "Property". The portion of the property on which the project is proposed is referred to as the "Project Site".

compliance. Mitigation has been proposed .. r impacts to sh \ tlands, coastal wetlands, wetland transition areas, and intertidal/subtidal shallows.

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2. INTRODUCTION

2.1 Background

On behalf of the applicant, Delaware River Partners (DRP), Ramboll Environ US Corporation ("Ramboll Environ") has prepared this compliance statement to support multiple individual permit applications for the development of the DRP Gibbstown Logistics Center, a multi-use deep water seaport and international logistics center. The development is located along the Delaware River at 200 North Repauno Avenue in Gibbstown, Gloucester County, New Jersey.

The project consists of the development of a multi-use deep water berth, open storage automobile import and processing terminal, break-bulk cargo storage area, bulk liquid storage area, and warehouses.

2.2 Regulatory Jurisdiction

Activities related to the project occur within regulated freshwater wetlands and freshwater wetland transition areas and are therefore subject to the requirements of the Freshwater Wetlands Protection Act Rules (FWPA, N.J.A.C. 7:7A).

The project is also located within the Flood Hazard Area (FHA) of the Delaware River and is therefore subject to the NJDEP Flood Hazard Area Control Act Rules (FHACA, N.J.A.C. 7:13).

The Project Site involves work in waterfront development areas and coastal wetlands and is therefore regulated under the Coastal Zone Management Rules (CZM, N.J.A.C. 7:7).

2.3 Purpose

The purpose of this statement is to demonstrate compliance of the proposed project with the FWPA, FHACA, and CZM Rules in support of multiple individual permit applications. This statement demonstrates compliance with the conditions of all of the following:

1. Freshwater Wetlands Protection Act Individual Permit (N.J.A.C. 7:7A), including:
   a. General Provisions for Individual Permits (N.J.A.C. 7:7A-7.1)
   b. Standard Requirements for all Individual Permits (N.J.A.C. 7:7A-7.2)
   c. Additional Application Requirements for an Individual Freshwater Wetland Permit (N.J.A.C. 7:7A-10.6)

2. Flood Hazard Control Act Individual Permit (N.J.A.C. 7:13), including:
   a. Regulated Activities within a Floodway (N.J.A.C. 7:13-11.3)
   b. Regulated Activities within a Flood fringe (N.J.A.C. 7:13-11.4)
   c. Requirements that apply to all regulated activities (N.J.A.C. 7:13-12.1)
   d. Applicable activity-specific requirements (N.J.A.C. 7:13-12.2 through 7:13-12.21)
   e. Environmental report requirements (N.J.A.C. 7:13-18.6)

3. Waterfront Development Individual Permit and Coastal Wetlands Individual Permit, including
   a. Coastal Zone Management Rules on Special Areas (N.J.A.C. 7:7-9)
   b. Coastal Zone Management Rules on General Water Use Areas (N.J.A.C. 7:7-12)

c. Requirements for non-porous cover and vegetative cover for general land areas and certain special areas (N.J.A.C 7:7-13)
d. Coastal Zone Management Location Rules (N.J.A.C. 7:7-14)
e. Coastal Zone Management Use Rules (N.J.A.C. 7:7-15)
f. Coastal Zone Management Resource Rules (N.J.A.C. 7:7-16)

2.4 Other Permits and Approvals

In addition to the individual permits listed above, the following permits or approvals have been or will be obtained to develop the DRP Gibbstown Logistics Center:

- NJDEP Freshwater Wetlands Letter of Interpretation (issued July 11, 2016, pending revision)
- USACE Jurisdictional Determination (issued July 5, 2016)
- USACE Section 404/10 Individual Permit
- NJ State Individual Water Quality Certificate
- NJDEP Sewer Connection Permit
- NJPDES Construction Stormwater General Permit
- NJ Tidelands License
- Gloucester County SCD Approval
- Gloucester County Planning Board Approval
- Greenwich Township Planning Board Approval

3. SITE DESCRIPTION

3.1 Site Location

The Project Site is located on 200 North Repauno Avenue in Gibbstown, Greenwich Township, Gloucester County, New Jersey. The Project Site occupies approximately 381 acres included in Block 8, Lots 1, 2, 3, 4, 4.01 and 4.02[2] as shown on Figure 3. The Project Site is a portion of the property formerly known as the Dupont Repauno Property and is bordered by the Delaware River to the north, undeveloped land to the east and west, and an industrial facility to the south. A USGS quad map and a street map showing the Project Site location are provided as Figure 1 and Figure 2, respectively. The portion of the Project Site to be developed consists of a Marine Terminal with four specific sections: (1) Multi-Purpose Berth, (2) General Cargo/Automobile Area, (3) Bulk Liquid Storage Area, and (4) Warehousing and Logistics Area. Each area is shown in Figure 1. To avoid, to the maximum extent practicable, a large forested wetland complex ("Central Forest") within the center of the site, the Warehousing and Logistics Area was shifted to the south and so is not contiguous with the otherwise connected sections of the Marine Terminal. A Photograph Log is provided in Appendix B depicting representative site areas.

3.2 Site History

The Dupont Repauno Property was first operated as a dairy farm before it was purchased by the E.I. du Pont de Nemours and Company ("DuPont") in 1880. The Property has been used for industrial purposes, including the manufacture of chemicals and explosives, for more than 100 years. Atlantic City Electric operated a power plant in the northwestern part of the Project Site from 1951 to 1986. The northern portion of the Project Site was historically filled to create uplands along the river and was extensively developed prior to the effective date of wetland regulations. These previously developed areas roughly correspond to the proposed Multi-Purpose Berth, General Cargo, and Bulk Liquid Storage areas.

In 1960, DuPont leased approximately 5 acres of the site to Cardox Corp. / Air Liquide for the production of dry ice. DuPont discontinued all organic manufacturing activities as of 1986 but leased 31 acres of the site to Repauno Products, which conducted sodium nitrate production operations from 1986 through 2006. In 1999, DuPont sold its industrial diamonds refining operation to Spring AG, which operated as Mypodiamonds under a ground lease with DuPont as of March 31, 1999. Mypodiamonds ceased operations in 2003. With the exception of Cardox Corp. / Air Liquide, which has continued to produce dry ice at the facility since 1960, all other manufacturing operations at the site were discontinued by December 2006. Chemours Co. FC LLC ("Chemours") became the owner of record of the Repauno site in April 2015. The Property was sold to DRP LLC on June 30, 2016.

A network of waste treatment ditches and settling basins were constructed in uplands to carry process water and storm water from the Dupont Repauno Property to the Sand Ditch west of the Project Site and to the E.L. Sluice Ditch to the east of the Project Site. Both of these conveyances discharge to the Delaware River. The network of constructed ditches is

[2] New lots will be created for the Project Site as part of a future subdivision.

part of a permitted waste treatment system that discharges through permitted outfall 001A and historically through permitted outfall 007A[3] as discussed further in Section 4.5.1.

Remedial activities and associated regulatory involvement began at the site in the early 1980s related to groundwater contamination identified at that time. In part related to those impacts, the NJDEP under authority from USEPA established an ACO in 1989 with DuPont to address various Solid Waste Management Units (SWMUs) and areas of concern (AOCs) under the Resource Conservation and Recovery Act (RCRA). Other AOCs at the site are currently being evaluated and remediated under New Jersey's Industrial Site Recovery Act (ISRA) process related to the pending transaction. Most recently in accordance with the Site Remediation Reform Act (SRRA), Chemours has retained a New Jersey Licensed Site Remediation Professional (LSRP) to design, oversee and approve the remedial investigations and remedial actions completed for both the ISRA and RCRA proceedings, with the ultimate goal of achieving a remedial action outcome (RAO) for the site. Chemours continues to monitor and recover contaminated groundwater as outlined in the Administrative Consent Order, including operation of the interceptor well systems for control of groundwater migration. For areas for which additional remedial investigation or remedial action is needed, Chemours has submitted certain documents for NJDEP review and approval. These remedial activities are ongoing.

[3]Outfall 007A may have been designated 010A after 2006.

4. SITE CHARACTERISTICS

The Project Site consists of the majority of the former industrial operations area of the Dupont Repauno Property. It is accessed by Repauno Avenue and bordered generally by C-Line Road (an extension of Repauno Avenue) to the east, the Delaware River to the North, and A-Line Road to the west. The Project Site is relatively flat with elevation ranging from -4 to 12 feet NAVD88. The area is mapped within the 100-year floodplain of the Delaware River, but the Project Site is cut off from the tidal influence of the Delaware River by a series of levees and tide gates. Delineated freshwater wetlands and mapped coastal wetlands are present within the central part of the Project Site as depicted on the Project Drawings and shown on Figure 4. The NJDEP has issued a LOI for the Project Site, identifying the presence of 48 acres of freshwater wetlands, 46 acres of mapped coastal wetlands and 20 acres of state open waters, including portions of the Delaware River (See Appendix C.)

4.1 Geology and Hydrogeology

The Project Site is located in the lowland subprovince of the Atlantic Coastal Plain physiographic region and is underlain by the bedrock from the Magothy formation. The Magothy formation is composed of fine to coarse grained sand and quartz interbedded with thin-bedded clay or clay silt (Owens et al. 1999). Bedrock at the Project Site is overlain by unconsolidated gravel, sand, silt and clay from the Cape May Formation (unit 2) and Salt Marsh and Estuarine Formation deposits containing organic material.

The Project Site is also located within the Magothy-Potomac Aquifer (MRPA) system, which supplies potable water to much of the surrounding area (DuPont 2003). Chemours has and will continue to operate a groundwater treatment system at the Project Site for the foreseeable future.

4.2 Soils

The USDA Natural Resource Conservation Service (NRCS) has mapped thee soil types covering the entire Project Site: Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded (MamuAv); Udorthents, dredged coarse material, 0 to 8 percent slopes (UddcB); and Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes (UddrB). Soils were generally observed to be sand, sandy silts or fill material.

4.3 Vegetation Communities

The Project Site is consists of a mix of developed and undeveloped areas. Developed areas are concentrated in the northern portion of the Project Site and include former industrial and manufacturing areas, which roughly correspond to the proposed Multi-Purpose Berth and Marine Terminal areas. Approximately half of the Project Site is vegetated, with phragmites and other disturbed vegetation communities present site-wide.

4.3.1 Upland Communities

The Central Forested Area, which is located between the proposed General Cargo and Warehousing Areas, is dominated by red maple-sweet gum deciduous forest with common upland tree species such as black cherry (*Prunus serotina*) and pines interspersed. The northern portion of the site and location of the proposed Marine Terminal is highly disturbed from prior development. The western arm of the proposed Marine Terminal, where the Bulk

Liquid Storage Area is proposed, is a densely vegetated (phragmites)-dominated community. Most shrub and herbaceous communities at the Project Site are dominated by invasive species including: common reed (*Phragmites australis*), mile-a-minute vine (*Persicaria perfoliata*), roundleaf greenbrier (*Smilax rotundifolia*), multi-flora rose (*Rosa muliflora*), Virginia creeper (*Parthenocissus quinquefolia*) and Japanese stiltgrass (*Microstegium vimineum*).

The upland forested areas of the site consist of habitat that would likely support species such as deer, mice, moles, shrews, raccoon, turkey, small amphibians, reptiles, owl, hawks, eagles, passerines, and other species that would reasonably be expected to inhabit a north eastern temperate hardwood forest. Field observations by Ramboll Environ in 2015 indicated that this habitat is currently being utilized by deer, turkey, Fowler's toad, woodcock, black rat snake, and passerines such as song sparrow and blue jay. There is a known bald eagle nest east of the Project Site that is located in a large stand of white pines, which are in an area dominated by red maple and sweetgum.

4.3.2 Urban/Built-up Upland Communities

The northern portion of the site consists of remnants from prior manufacturing. While the majority of manufacturing buildings were demolished during the summer of 2015, remnants of structures from former operations remain such as utility poles, concrete sub slabs, asphalt, tide gates, pier structures, a loading arm for bulk liquids, and piping. This portion of the site has not been maintained and has been allowed to become overgrown with vegetation common to disturbed areas such as common reed (*Phragmites australis*) and common mugwort (*Artemisia vulgaris*). Typical fauna that would utilize this type of environment consists of species such as deer, mice, moles, shrews, raccoon, small amphibians, reptiles, owl, hawks, passerines, and other species that would be expected to inhabit a highly disturbed landscape in the northeast region of the US. This area is within close proximity to the Delaware River with utility poles and other tall structures present that have attracted nesting and foraging osprey. Four nests were observed being built during nesting season; however, by early July 2016, all nests were inactive. The occurrence of osprey at the Project site is discussed further in Appendix E. Field observations by Ramboll Environ in 2015 indicated that this habitat is currently being utilized by deer, Fowler's toad, black rat snake, osprey, red-tailed hawk, mice, and passerines such as redwing blackbird, American robin, song sparrow, and blue jay.

4.3.3 Wetlands

A wetland delineation conducted by Ramboll Environ in the summer and fall of 2015 identified 62 wetland features totaling approximately 100 acres of coastal and freshwater wetlands.[4] Typical emergent wetland areas on site have a vegetative community which consists of species such as common reed, mile-a-minute, and soft rush. The forested wetlands on site primarily consist of a sweetgum and red maple with an understory dominated by highbush blueberry with sparse vegetative cover and water staining on the forest floor. A LOI was issued for the Project Site on July 11, 2016 (See Appendix C), which verifies the wetland boundaries shown on the wetlands survey submitted June 14, 2016, and

[4] Because they are not regulated features, most of the constructed waste treatment system ditches and related open water features are not included in this total acreage.

establishes the resource value of adjacent transition area if present.[5] A description of on-site wetlands, including information on wetland type and dominant vegetation, is provided in Table 1.

As shown on the wetlands survey approved by the LOI, a portion of the Project Site is below the Upper Wetland Boundary (UWB) line, which generally establishes the limit of coastal wetlands pursuant to the Wetlands Act of 1970 (N.J.S.A. 13:9A). The UWB was digitized from the 1970 Coastal Wetland source map and further refined to account for field-delineated wetlands within proximity to the UWB as discussed during March 22, April 13, and May 24, 2016 consultations with NJDEP staff. The approximate acreages of mapped coastal and delineated freshwater wetlands within the Project Site, as approved by the LOI are summarized in Table 2 and shown on Figure 4.

4.4 Wildlife Communities

Wildlife on the Project Site consists of deer, groundhog, mice, moles, shrews, raccoon, turkey, small amphibians, reptiles, owl, hawks, eagles, passerines, and other species that would reasonably be expected to inhabit a northeastern temperate hardwood forest. Beaver and muskrat have also been observed in the central portion of the Project Site within the wetland ditch features north of Broadway Road.

Common avian fauna on the Project Site include song sparrow, American robin, blue jay, downy woodpecker, red-tailed hawk, redwing blackbird, and several other common passerines. Bald eagles (State endangered) and osprey (State threatened) have been observed on or near the Project Site. Additional information on these species is provided in in Appendix E, Threatened and Endangered Species Habitat Impact Assessment.

4.4.1 Aquatic Biota

The Project Site contains approximately 21 acres of open water habitat, including 20 acres of tidal waters within the Delaware River. As discussed at Section 4.5.1 below, the Project Site contains several ditches comprising a permitted waste treatment system, the majority of which is not regulated under the FWPA. According to a 2003 Ecological Investigation Report, these ditches are only capable of supporting highly tolerant aquatic infauna communities adapted to withstand harsh conditions. Portions of these ditches are known to be impacted by prior industrial operations and their sediments will be further disturbed during remediation by Chemours.

Dominant macroinvertebrate taxa observed in on-site ditches include adult aquatic beetles (Colepotera) and aquatic bugs (Hemiptera). Common tolerant fish species, such as carp and mummichog, were observed within the off-site Sand Ditch basin; however, the presence of fish in on-site open water features is unlikely due to physical limitations, poor habitat structure, limited food source, and predator influences (DuPont 2003a). Tide gates located at the head of E.L. Sluice and Aunt Debs Ditch (see Figure 4) block the passage of fish from the Delaware River into on-site waters.

[5] Through subsequent communications with NJDEP regarding minor corrections and changes to resource value classification, a revision of the LOI is pending.

4.4.2 Threatened and Endangered Species

A review of the New Jersey Natural Heritage Database search results (see Appendix E) and NJ Landscape Project identified the potential for bald eagle (*Haliaeetus leucocephalus*), state endangered, and osprey (*Pandion haliaetus*), state threatened, habitat to be present at the Project Site. Shortnose Sturgeon (*Acipenser brevirostrum*), federal and state endangered, habitat was identified for the Delaware River. The Natural Heritage Database search results did not identify Rare Plant Species and Ecological Communities on the Project Site or in the immediate vicinity. No Natural Heritage Priority Sites were identified on the Project Site.

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) tool identified three threatened species with the potential to be present within the Project Site: Red Knot (*Calidris canutus rufa*), Northern Long-eared Bat (*Myotis septentrionalis*) and Bog Turtle (*Clemmys muhlenbergii*), Appendix E. Red Knot is a migratory bird species that generally uses beaches and mudflats along the Atlantic Coast of New Jersey for stopover areas and is not expected be present in the area of the Project. The Bog Turtle is an endangered species in New Jersey and occurrences and habitat are mapped by the Landscape Project; no bog turtle occurrences were identified within 1 mile of the Project Site and it is not expected to be present. The Northern Long-eared Bat is present state wide in New Jersey and summer roosting habitat may be present within the Project Site. Guidance from the National Marine Fisheries Service (NMFS) identifies the Delaware River as habitat for Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*). A detailed analysis of the life characteristics, potential impacts, and affected habitat for the above-referenced species is provided in Appendix E, Threatened and Endangered Species Habitat Impact Assessment Report.

4.5 Surface Waters

According to NJDEP's GeoWeb online mapping tool, the Project Site is located within the Cedar Swap/ Repaupo Creek/ Clonmell Creek hydrologic unit code (HUC) 11 watershed. The Project Site may be further subdivided into two subwatersheds: Repaupo Creek (below Tomlin Station Road) / Cedar Swamp hydrologic unit code and Nehonsey Brook/Clonmell Creek.

A levee and tide gates located along the Delaware cause the Project Site hydrology to be disconnected from the tidal influence of the Delaware River. A permitted waste treatment system drains most of the Project Site to outfall 001A located at Sand Ditch. The ditches in the northern part of the Project Site drain south beneath Broadway to the Process Ditch. Just south of Broadway in AOC D, the Nitrobenzene Ditch drains west to the Process Ditch. From its confluence with the Nitrobenzene Ditch, the Process Ditch continues south before turning to the west where it extends approximately 1500 feet before converging with the PMDA Ditch east of A-Line Road. An internal[6] permitted outfall 007B discharges water from a groundwater treatment system to the Process Ditch east of A-Line Road near the convergence of the Process Ditch and the PMDA Ditch. The Process Ditch water is treated at a facility west of A-Line road and then flows via the Sand Ditch to outfall 001A where it discharges to Aunt Debs ditch and eventually the Delaware River.

[6] The 007B outfall is referred to as an "internal outfall" because it discharges internally to the waste treatment system, upstream of the 001A outfall.

Several small ditches in the western part of the Project Site and the area west of A-Line Road drain south or west to a wetland complex that eventually drains to the Sand Ditch and Delaware River. Ditches and drainage features east of C-Line Road generally drain east and north via E.L. Sluice Ditch which discharges to the Delaware River. Historically, this discharge outfall was permitted as outfall 007A.

As defined by the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B, the Water Quality Classification of the Delaware River in the vicinity of the Site is category 2 freshwater, non-trout waters, saline waters [FW2-NT/SE2].

4.5.1 Permitted Waste Treatment System

A man-made waste treatment ditch system is located across the Project Site and encompasses approximately 21,000 linear feet of permitted ditches (DuPont 2006). Under NJPDES Permit No. NJ0004219, this ditch system serves as a permitted wastewater, treated groundwater, and storm water conveyance system for the majority of the Dupont Repauno Property. The ditches direct collected wastewater to permitted outfall 001A and historically, to outfall 007A, located on tributaries to the Delaware River. On the Project Site and areas west of the Project Site, the majority of the ditches convey process water and storm water towards the west and to the Sand Ditch. Sand Ditch provides for settlement of solids before discharging to outfall 001A located on Aunt Deb's Ditch, which is a tributary to the Delaware River (NJDEP 2010). East of the Project Site, the ditch system conveys wastewater north to E.L. Sluice ditch. E.L. Sluice discharges to the Delaware River. Historically, this discharge outfall was permitted as outfall 007A.

The minor ditches in the northern project area are unnamed, but in this report are identified as Ditch O, P and Q. As presented in reference to the LOI application (See Appendix C), major ditches in the northern project area are known as the Nitrobenzene Ditch, PMDA Ditch, MB-W2 Ditch and Process Ditch. While the exact year of construction of the ditch system is not known, visual evidence of ditches is present in aerial imagery dating back to the 1930s[7]. Given that the Sand Ditch Settling Basin was constructed in the late 1700s (See Appendix J), it is likely that the existence of the ditch system pre-dates aerial imagery. Prior to 1974, ditches were primarily used to transport process water from nitric and sulfuric acid production (DuPont 2003). Wastewater from organic compounds manufacturing was also discharged to the ditch system during this time (DuPont 2003, DuPont 2006).

4.5.2 Regulated Waters

A watershed analysis was performed for the Project Site using Geographical Information Systems (GIS) in order to determine the drainage areas of on-site waters. Drainage areas were determined by analyzing 2014 one foot elevation contours using the ArcGIS Hydrologic toolset and manual interpretation of flow direction. The analysis determined that the O, P, and Q ditches, MB-W2 Ditch, Nitrobenzene Ditch, PMDA Ditch, and on-site portions of C-Line Road Ditch drain less than 50 acres. Only the Delaware River, E.L. Sluice Ditch, portions of C-Line Road Ditch east of the Project Site, and portions of the Process Ditch south of the O Ditch drained greater than 50 acres. The results of the analyses are presented in Figure 5.

[7] Ramboll Environ 2016. Letter to Brett Kosowski, Re: Additional and Revised Information in Support of Application for Freshwater Wetlands Letter of Interpretation – Line Verification Application DLUR File No. 0807-16-0001.1. (See Appendix C).

As stated at N.J.A.C. 7:13-2.2, manmade conveyances which drain less than 50 acres are not considered regulated waters under the FHACA Rules.[8] Therefore, the Delaware River, E.L. Sluice Ditch, eastern segment of C-Line Road Ditch, and downstream portion of the Process Ditch which drain more than 50 acres are the only on-site regulated waters having a riparian area subject to the rules at N.J.A.C. 7:13. This information was provided to NJDEP in reference to a pending FWW General Permit 4 for remediation activities in the Nitrobenzene Area (see Appendix C).

4.6 Characterization of Proposed Dredge Materials

Dredging is planned as part of the proposed redevelopment of the site and is necessary to allow cargo vessels access to the proposed multi-purpose pier, which will be located largely within the footprint of an existing, deteriorated wharf. The target dredging depth is -40 feet Mean Lower Low Water (MLLW). The dredging volume and sediment characterization also accounts for an additional one foot for overdredging. To reach the target depth, approximately 457,000 cubic yards of sediments would need to be dredged over an area of approximately 29 acres (See Drawing D-101).

To characterize sediments proposed to be dredged, sediment samples were collected for analytical testing, including bulk sediment chemistry (metals, pesticides, semi-volatiles, and PCB Aroclors) and Synthetic Precipitation Leaching Procedure (SPLP) analysis. The results of this sampling and analysis are provided in Appendix F.

Results of analyses performed on both discrete and composite sediment samples identified concentrations of several compounds which exceeded applicable NJ Residential and Non-Residential Direct Contact Soil Remediation Standards (SRS) and/or the NJ Impact to Groundwater Soil Screening Level (IGWSSL). Specifically, benzo(a)pyrene, arsenic, and polychlorinated biphenyls (PCBs) were detected above applicable SRS in all nearshore areas. Except for a few occurrences of Beryllium and Manganese detected above the IGWSSL, constituents were not detected above the SRS in the offshore samples. The SPLP composite results did not exceed the impact to groundwater leachate (SPLP) criterion in any sample. These data are presented in detail Appendix F.

[8] See N.J.A.C. 7:13-2.2(a)

5. PROJECT DESCRIPTION

5.1 Overview

The proposed DRP Gibbstown Logistics Center project involves the development of a multi-use, deep-water seaport and industrial logistics center. The development of the Marine Terminal includes:

Multi-Purpose Berth and Mooring Dolphins

- Demolition of dilapidated marine structures
- Dredging of approximately 457,000 cy of material within a 29-acre area adjacent to the existing wharf
- Construction of multi-purpose open berth with breasting and mooring dolphins

Auto Terminal

- Clearing, fill, and grading of approximately 100 acres
- Construction of vehicle processing buildings totaling 107,870 SF

General Cargo Area

- Clearing, fill, and grading of approximately 13.6 acres
- Construction of two storage warehouses totaling 150,000 SF

Bulk Liquids Storage Area

- Clearing, fill, and grading of approximately 67.2 acres
- Installation of storage tanks with targeted storage volume of 2M barrels of energy liquid products
- Railyard refurbishment and construction
- Construction of a small operations buildings

Warehousing Area

- Clearing, fill, and grading of approximately 37 acres
- Construction of two warehouses totaling 522,500 SF

In addition to the activities described above, repairs and enhancements to existing site roadways and rail infrastructure are also proposed, including refurbishment of existing rail lines and widening of A-Line and C-Line Roadways to a maximum width of 36 feet.

Development of the Marine Terminal, requires fill within freshwater wetlands, coastal wetlands, and limited State Open Waters, as well as within waste treatment system ditches not regulated by the FWPA. These impacts are summarized in Section 6.2. Locations of impacted wetlands and waters are shown on the Project Drawings. Compliance with applicable requirements for impacts to wetlands and regulated waters is discussed at Sections 1, 7 and 9 within this compliance statement.

5.2 Multi-Purpose Berth and Mooring Dolphins

A new multi-purpose berth is proposed that is capable of handling a range of ships transporting automobile, break-bulk cargo, and bulk liquid products. This berth will replace the existing dock and marine structures constructed by DuPont in the early 1960s, thereby taking advantage of land area that was previously disturbed and waters that have been previously dredged.

Demolition Activities

As discussed in the Alternatives Analysis (see Appendix D), little to no maintenance has been performed on the existing marine structures since the DuPont plant closed in 1995. An April 2016 site inspection determined that existing wharf structures are in critical condition with several components collapsed or in severe disrepair. Due to the instability of the existing barge berth, existing structures are proposed to be demolished to improve safety conditions and remove the potential for floating debris. Demolition activities will include removal of all existing timber piles and extraction of sheet pile and concrete ice breaker structures. The limits of demolition are shown on Drawing SD-101 of the Project Drawings.

Berth Construction

The proposed multi-purpose berth will be designed to accommodate vessels up to 870 feet in length. The berth will be constructed utilizing one breasting dolphin and two mooring dolphins extending from the bow end of the wharf, which reduces the required berth length to 751 feet (see Drawing S-100). The structural footprint over the water is approximately 107,445 SF, a 33% reduction compared to alternative designs (see Appendix D).

5.2.1 Dredging

Dredging is proposed within 29 acres of the former berth within the Delaware River (see Drawing D-101). Current water depth in the area is approximately -37 ft. The target dredging depth is -40 feet[9] Mean Lower Low Water (MLLW). The depth of the dredging area was based on the required clearance for cargo transport vessels expected to utilize the proposed berth. Sediments within the dredge area consist of silts and sands, with grain size typically increasing toward the main channel of the Delaware River. Pockets of refuse, gravel and cobbles were present in some sediment cores. Additional sediment characterization information, including sediment boring logs and analytical test data are provided in the Identification of Management Options for Dredged Sediments (Appendix F).

Dredging details are shown on Drawing D-101. Accounting for one foot of overdredge, the total dredging volume is approximately 457,000 cubic yards of material. Management of dredged materials is discussed in Appendix F.

It is expected that sediments will be dredged using an environmental clamshell and Best Management Practices (BMPs) will be used to limit the potential for sediment resuspension and associated impacts on water quality and aquatic biota (See Appendix E).

A discussion of the potential impacts of dredging on endangered sturgeon is available in the Threatened and Endangered Species Habitat Impact Assessment (Appendix E).

[9] Corresponds to approximately -43-ft NAVD88.

5.3 Auto Terminal

The Auto Terminal[10] consists of the storage and maintenance facilities for wheeled cargo transported from roll-on/roll-off ("Ro-Ro") vessels. The terminal is located south of the proposed multi-purpose berth and encompasses approximately 100 acres. The terminal includes the following facilities and areas, as shown on the Project Drawings.

1. *Open storage area* - Approximately 41.5-acres of paved open storage, which includes the first point of rest for "RoRo" cargo, as well as longer term open storage areas.
2. *Truck Away and Rail Away Staging*- Approximately 14.3-acre staging area for cargo that is to be transported offsite.
3. *Auto Terminal Railyard* – Refurbishment and expansion of existing rail lines to provide rail transport for wheeled cargo. A rail staging area is proposed adjacent to the auto terminal railyard.
4. *Vehicle Processing Area* – Approximately 33.5 acres, including
   a. An approximately 93,830 SF building used for the modification and accessorization of recently fabricated vehicles.
   b. An approximately 14,105 SF building for the repair and maintenance of motor vehicles.

In addition, a car wash, fueling station, administrative building, and employee parking area is also proposed within the Auto Terminal area (see Drawing C-100).

5.4 General Cargo Area

A General Cargo Area is proposed west of the Auto Terminal. This area will include a 100,000 SF cold storage building and a 50,000 SF dry storage building, and will provide storage for a variety of refrigerated and non-refrigerated cargo. The total area allocated for buildings, staging and circulation is approximately 13.6 acres. Approximately 162 parking spaces will be constructed for employees working at the dry and cold storage buildings.

5.5 Bulk Liquids Storage Area

A bulk liquids storage facility is proposed in the western portion of the Project Site. The facility is approximately 67 acres. Additional space is proposed to be allocated for the construction of a fuel railyard capable of handling 5,000 to 6,000 feet of rail cars and a 5-bay truck rack. The current site design incorporates existing infrastructure (substation, rail infrastructure, pump station) into the selected layout.

The liquids storage facility consists of four primary storage tank areas:

1. *Refined Product Tank Area* – for storage of refined liquid products. The minimum target storage volume for this area is 600,000 barrels (bbl). Materials will be stored in six 120-feet diameter tanks across two areas of the facility.
2. *Crude Products Tank Area* – for storage of crude products. Minimum target storage is 1,2 million bbl in 175-feet diameter tanks.

[10] The Auto Terminal is also referred to as the "Ro-Ro Parcel" in the Alternatives Analysis (Appendix D).

3. *Sphere Tank Area* – for storage of pressurized liquids. The minimum storage target is 500,000 bbl. Materials will be stored in 82-feet diameter tanks.
4. *Underground Storage Cavern* - an existing subterranean hard rock cavern located on the Project Site is being repurposed by the applicant for the use of storing butane. The cavern has a capacity of approximately 200,000 bbl and is capable of handling products up to 75 PSI. Utilization of the underground storage cavern reduces the need for four additional above-ground sphere tanks, thereby narrowing the footprint of land disturbance by approximately 2.5 acres.

5.6 Warehousing Area

A logistics and warehousing area is proposed on approximately 37 acres in the southern portion of the Project Site. This area includes two warehouses totaling 522,500 SF. The dimensions and areas of both warehouses are shown on (see Drawing C-100).

5.7 Transportation Improvements

In addition to the proposed development areas described above, the project involves site-wide transportation improvements, including enhancements and repairs to existing roadways and rail infrastructure. These upgrades are necessary to enable efficient transport of goods and material from port off-loading areas to other warehouses and open storage areas on-site. Proposed improvements to rail and roadway infrastructure as described below.

1. *Rail Access* - The Site currently has active rail service utilized by the existing dry-ice manufacturing tenant in the southern portion of the property. DRP intends to refurbish and expand the existing network of rail spurs throughout the Project Site in order to provide rail service to the proposed facilities at the site (see Drawing C-100).
2. *Road Improvements* – Portions of A-Line and C-Line Road will be widened in order to accommodate traffic to and from the marine terminal. As shown on Drawing C-100, portions of C-Line and A-Line road are proposed to be widened to a width of 34 feet. Current road widths are approximately 20-22 feet. Intersection improvements are also proposed along existing C-Line and A-Line Roads (see Drawing C-401). These improvements will enable more efficient ingress/egress into the proposed development. A-Line Road Extended, which runs east-west through the center of the proposed Warehousing and Logistics Area will be reconfigured to allow for more efficient flow of traffic.

5.8 Construction Schedule

Pending receipt of the required approvals, development of the Marine Terminal is scheduled to begin in Spring 2017 and proceed throughout the year. The scheduling of specific construction activities will depend on site conditions, permit conditions, and conditions of local land use approvals.

6. JUSTIFICATION

As presented in further detail in the Alternatives Analysis provided in Appendix D, the project location represents the most suitable site for the proposed activity based on the proximity to the Federal navigation channel of the Delaware River, the limited amount of new dredging required to access the berthing area, and the absence of logistical and technological barriers to development.

Various on-site configurations of the proposed development were also analyzed in determining the site layout. The selected design maximizes the efficiency for circulation roads and rail lines, improves cargo operations and maximizes storage capacities while minimizing and avoiding impacts to wetlands and riparian zones to the maximum extent practicable. The project footprint has been significantly reduced from its initial conception and refined to reduce impacts to wetlands to the maximum extent feasible given the water-dependent nature of the Marine Terminal and the need to accommodate transit warehousing, longer-term storage, and the internal circulation attendant to the site use as a logistics center. The revised project layout clusters development in previously disturbed areas wherever possible, utilizes existing infrastructure to avoid additional disturbance, and specifically avoids a large forested wetland complex in the central portion of the site ("Central Forest"). The selected project design minimizes impacts to the environment to the maximum extent practicable.

Refer to Appendix D for a detailed analysis of project alternatives.

6.1 Statement of Water-Dependence

The proposed development requires direct access to the Delaware River waterfront in order to function as a deep water seaport. Associated activities, including the construction of transit warehousing and longer term storage and warehousing areas, are dependent on the delivery of cargo arriving from ships to the proposed port. In the absence of a waterfront port, goods transported by vessels will not be delivered to the Site, and the basic purpose of the proposed project is not fulfilled. For this reason, the development meets the definition of a "water-dependent" activity as defined at N.J.A.C. 7:7A-1.4.

6.2 Necessary Disturbance of Wetlands, Wetland Transition Areas, and Riparian Zones.

As summarized in Table 3, the proposed activities require the fill of approximately 8 acres of freshwater wetlands and 6 acres of coastal wetlands. In addition, 49 acres of wetlands transition area will be impacted. Work adjacent to regulated waters is expected to impact 7.2 acres of riparian zones. These impacts reflect that some wetland areas will be filled in connection with NJDEP-approved remediation activities that will be completed at the site before certain development activities commence.[11] Mitigation for the proposed impacts to coastal and freshwater wetlands is discussed in the Mitigation Proposal (see Appendix H).

[11] Based on the FWW, CZM, FHA permit application submitted for the Nitrobenzene Area remediation (DLUR File No. 0807-06-0002.1, CZM160001, FHA 160001, FWW 160002) and the FWW, CZM permit application received for the Redevelopment Area Interim Remedial Measures (DLUR File No. 0807-06-0002.1, FWW160007, CZM160003), these impacts are approximately 2 acres.

Because the development is water dependent, there is no limit on disturbance to v t
riparian zones and no mitigation is required.

7. STATEMENT OF COMPLIANCE WITH FWPA RULES

This section presents and describes compliance with the applicable requirements of the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A), including general provisions for Freshwater Wetlands Individual Permits (N.J.A.C. 7:7-7.1) and conditions that apply to all individual permits (N.J.A.C. 7:7A-7.2).

In each sub-section, the condition is summarized in *italics* and followed by a statement of compliance with that condition.

7.1 General provisions for individual permits (N.J.A.C. 7:7A-7.1)

Compliance with general provisions for individual permits is addressed below.

(a) To be authorized under an individual permit, an activity shall meet the following requirements:

1. *All activities that require an individual permit shall meet all of the requirements at N.J.A.C. 7:7A-7.2;*

   As discussed in Section 7.2 hereof, compliance with N.J.A.C. 7:7A-7.2 is met.

2. *In addition to the requirements at N.J.A.C. 7:7A-7.2, a non water-dependent activity, as defined at N.J.A.C. 7:7A-1.4, shall meet the requirements at N.J.A.C. 7:7A-7.4, except if the activity disturbs only State open waters that are not special aquatic sites as defined at N.J.A.C. 7:7A-1.4; and*

   As described in Section 6.1, the proposed activities are water-dependent and therefore, are not subject to the requirement at N.J.A.C. 7:7A-7.4.

3. *In addition to the requirements at N.J.A.C. 7:7A-7.2, a non water-dependent activity in exceptional resource value wetland or trout production water shall meet the requirements at N.J.A.C. 7:7A-7.5.*

   The proposed activities are water-dependent and therefore, are not subject to the requirement at N.J.A.C. 7:7A-7.5.

(b) The Department shall not consider a mitigation proposal in determining whether an individual permit will be issued for a project.

The applicant understands that the Department does not consider mitigation proposals in determining whether to issue an individual permit; therefore, this condition is satisfied.

(c) Each individual permit applies to the entire site upon which permitted activities occur. An applicant shall not segment a project or its impacts by applying for general permit authorization for one portion of the project and applying for an individual permit for another portion of the project. Similarly, an applicant shall not segment a project or its impacts by separately applying for individual permits for different portions of the same project.

The proposed activities, for which an individual permit is being sought, constitute the entire port and marine terminal project, located primarily on Lots 1, 2, 3, 4, 4.01 and 4.02[12] of the site. Freshwater Wetlands General Permits and Transition Area Waivers (DLUR File No. #0807-06-0002.1) were recently issued for a project on adjacent lots located on the property (recently subdivided Lots 4.05, 4.06). This property is being developed independently for use as a cold storage distribution facility and is not immediately dependent on the port. The impacts to wetlands and wetland transition areas for that project are authorized by general permits and do not exceed the impacts allowed by the applicable general permits. Therefore, this condition is met.

(d) In some cases, a regulated activity that requires an individual permit and is located in an area under the jurisdiction of the Pinelands Commission also requires approval by the Pinelands Commission, in accordance with the Pinelands Comprehensive Management Plan (CMP). For information on freshwater wetlands in the Pinelands, contact the Pinelands Commission at (609) 894-7300 or through its website at www.state.nj.us/pinelands.

The proposed project is not located in an area under the jurisdiction of the Pinelands Commission; therefore, this condition does not apply.

7.2 Standard requirements for all individual permits (N.J.A.C. 7:7A-7.2)

Compliance with general provisions for individual permits is addressed below.

(b)1. The project has no practicable alternative which would:
i. Have a less adverse impact on the aquatic ecosystem or would not involve a freshwater wetland or State open water; and
ii. Not have other significant adverse environmental consequences, that is, it shall not merely substitute other significant environmental consequences for those attendant on the original proposal;

As described in the Alternatives Analysis (See Appendix D), practicable location alternatives were limited to those properties with sufficient developable land, located along the Delaware River with deep water access to the navigation channel, within 100 miles of the Atlantic Ocean and the greater New York/New Jersey Market Area, and that were available for acquisition. The Project Site represents the most suitable site for the proposed activity based on its previous use as an industrial waterfront facility for over 100 years, existing port structures, existing infrastructure, previously dredged access channel to the navigation channel of the Delaware River, adequate developable land area, and convenient access to intermodal transportation routes.

Various on-site configurations of the proposed development were analyzed in determining the site layout. The selected design maximizes the efficiency for circulation roads and rail lines, improves cargo operations and maximizes

[12] New lots will be created for the Project Site as part of a future subdivision.

storage capacities while minimizing and avoiding impacts to wetlands and riparian zones to the maximum extent practicable.

The project footprint has been significantly reduced from its initial conception (by over 50 acres) and was thereafter refined to further reduce impacts to wetlands to the maximum extent feasible given the water-dependent nature of the Marine Terminal and the need to accommodate transit warehousing, longer-term storage, and the internal circulation attendant to the site use as a logistics center. The revised project layout clusters development in previously disturbed areas wherever possible, utilizes existing infrastructure to avoid additional disturbance, and specifically avoids impacts to a large forested wetland complex in the central portion of the site ("Central Forest").

Similarly, the wharf is designed with an open construction layout to avoid impacts to State Open Waters. The selected project design minimizes impacts to the environment to the maximum extent practicable. Derelict and dilapidated structures that were a remnant of prior operations will be removed, thus restoring open water areas. By utilizing an existing berth that was previously dredged, the project minimizes the need for additional dredging.

All steps having been taken to reduce the development footprint to meet the project demand, there is no practicable alternative to the selected configuration of the project that would have a less adverse impact on the aquatic ecosystem or would not involve a freshwater wetland or State open water; therefore, this condition is met.

(b)2. The project will result in the minimum feasible alteration or impairment of the aquatic ecosystem including existing contour, vegetation, fish and wildlife resources, and aquatic circulation of the freshwater wetland and hydrologic patterns of the HUC 11 in which the activity is located;

Because this site has industrial history dating back to approximately 1890, it has been significantly disturbed, as demonstrated by the modified landscapes, areas of debris, former road systems, active power lines, concrete sub slabs, asphalt, pier structures, former pipelines, and construction of a system of manmade ditches for the conveyance of process waste water. Certain wetland features were created as a result of this disturbance, which altered aquatic circulation and hydrologic patterns of the local watershed.

As discussed above, the project footprint has been significantly reduced from its initial conception and refined to reduce impacts to wetlands to the maximum extent feasible given the water-dependent nature of the Marine Terminal and the need to accommodate transit warehousing, longer-term storage, and the internal circulation attendant to the site use as a logistics center. The revised project layout clusters development in previously

disturbed areas wherever possible, utilizes existing infrastructure to avoid additional disturbance, and specifically avoids impacts to the Central Forest.

The wharf is designed with an open construction layout to avoid impacts to State Open Waters. The selected project design minimizes impacts to the environment to the maximum extent practicable. Derelict and dilapidated structures that were a remnant of prior operations will be removed, thus restoring open water areas. By utilizing an existing berth that was previously dredged, the project minimizes the need for additional dredging.

The selected project design minimizes impacts to the environment to the maximum extent practicable; therefore, this condition is met.

(b)3. Will not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species; and shall not jeopardize the continued existence of any local population of a threatened or endangered species, as defined at N.J.A.C. 7:7A-1.4;

The Project Site contains habitat potentially suitable for bald eagle (State Endangered), osprey (State threatened) and northern long-eared bat (*Myotis septentrionalis*). Atlantic sturgeon and shortnose sturgeon (federally endangered) habitat has been identified within the Delaware River generally. Refer to Appendix E for a detailed analysis of the suitable habitat, potential impacts, and affected habitat for these species.

Through avoidance, minimization, and mitigation measures, no adverse impacts to threatened and endangered species or their habitat are expected as result of the Project.

- Bald eagles and osprey nests within or near the Project Site will be protected or relocated and mitigation for potential disturbance will include building nesting platforms, burying high voltage powerlines, and developing a management plan to protect bald eagle and osprey nests.
- Northern long-ear bats are unlikely to be present, but tree removal in areas of potential roosting habitat will be avoided during pup season from June 1 through July 31.
- Atlantic and shortnose sturgeon may forage or migrate through areas of the Delaware River disturbed by in-water work. Impacts to sturgeon will be avoided by conducting work within the recommend construction window and implementing mitigation measures and dredging best management practices.

Further, the loss of threatened and endangered species habitat mapped by the landscape project is not expected to adversely impact species due to the low quality of the habitat and the availability of ample high quality habitat adjacent to the Project Site.

(b)4. Will not be likely to result in the destruction or adverse modification of a habitat which is determined by the Secretary of the United States Department of the Interior or

the Secretary of the U.S. Department of Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, 16 U.S.C. § 1531 et seq.;

No critical habitat was identified within or adjacent to the Project Site.[13]

(b)5. The Project will not cause or contribute to a violation of any applicable State water quality standard;

During construction, a Soil Erosion and Sediment Control Plan, approved by the Gloucester County Soil Conservation District will be implemented. In conjunction with this plan, the applicant will obtain a New Jersey Pollutant Discharge Elimination System (NJPDES) Stormwater Permit for construction activities. Monitoring and reporting of storm water quality will be implemented as may be required by that permit. Additionally, a NPDES storm water permit will be obtained for the operating facility, and monitoring and reporting of storm water quality will be implemented as may be required by that permit. Therefore, the project and will be constructed and operated in accordance with valid Soil Erosion and Sediment Control Plans and NJPDES permits, such that the project will not cause or contribute to a violation of any applicable State water quality standard. Accordingly, this requirement is met.

(b)6. The Project will not cause or contribute to a violation of any applicable toxic effluent standard or prohibition imposed pursuant to the Water Pollution Control Act;

As a port facility, the Project will not involve manufacturing process that will produce a wastewater discharge subject to toxic effluent standards. As stated in the previous paragraph, applicable NJDPES permits will be obtained for the Project. Accordingly, this requirement is met.

(b)7. The Project will not violate any requirement imposed by the United States government to protect any marine sanctuary designated pursuant to the Marine Protection, Research and Sanctuaries Act of 1972, 33 U.S.C. §§ 1401 et seq.;

There is no marine sanctuary in the vicinity of the project; therefore, this requirement is met.

(b)8. The Project will not cause or contribute to a significant degradation, as defined at 40 C.F.R. 230.10(c), of ground or surface waters;

As an intermodal port facility, the operations involve the transfer of goods and no manufacturing operations. As required, the facility will operate with appropriate, valid wastewater or storm water discharge permits; therefore, the project will not cause or contribute to significant degradation of ground or surface water.

[13] On June 3, 2016, the NMFS submitted a proposal to designate portions of the Delaware River as critical habitat for the New York Bight Distinct Population Segment (DPS) of Atlantic Sturgeon (81 F.R. 35701). An official determination on the proposed designation has not been made.

(b)9. Will not adversely affect a property which is listed or is eligible for listing on the New Jersey or National Register of Historic Places unless the applicant demonstrates to the Department that the proposed activity avoids or minimizes impacts to the maximum extent practicable or the Department determines that any impact to the affected property would not impact the property's ability to continue to meet the criteria for listing at N.J.A.C. 7:4-2.3 or otherwise negatively impact the integrity of the property or the characteristics of the property that led to the determination of listing or eligibility.

A Phase I Historic and Archaeological Assessment was completed for the Project by Hunter Research Inc., Historical Research Consultants (See Appendix J). While the site has a long manufacturing history, it is not listed or eligible for listing on the New Jersey or National Register of Historic Places.

Although several architectural resources in excess of 50 years of age were identified, none of these properties area considered potentially eligible for inclusion in the New Jersey or National Historic Registers. Fieldwork and research also considered any significant landscape features or viewsheds surrounding the project site, and none were identified. No further architectural investigation is recommended. The project is considered to have no potential to impact significant architectural resources. As stated in the Phase I report, the documentary evidence of the DuPont Repauno Works, largely available at the Hagley Museum, already serves as a more substantial and complete record of the development of the site and the activities and processes that took place there than any further archaeological investigation could contribute.

A Native American archaeological site was previously documented at Thompson Point, in a previously disturbed area at the far eastern portion of the Project Site. However, this location and the property as a whole is assigned an overall low potential to yield significant Native American archaeological remains. This assessment is largely because of the extensive modifications made to the landscape over the last 130 years of development and industrial use. Thompson Point is also the location of a potential early historic site, ranging from the late 17th through the 19th century, but the historic archaeological potential of this location is considered low for the same reasons as Thompson Point. One area that may hold archaeological potential is the Miller/Mullin Farm site located along C Line Road in the southeastern portion of the project site as shown on Figure 5-1 of Appendix J. Hunter Research recommended that this area, which is located just south of the Central Forest, be avoided if possible. Based on the project needs, and particularly in light of efforts to avoid impacts to the wetlands complex in the Central Forest, development within the potential Miller/Mullin Farm area cannot be avoided; therefore, a Phase 1B archaeological investigation and assessment is being conducted. The results of that study will be provided as soon as it is complete.

(b)10. The project will not violate the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., or implementing rules at N.J.A.C. 7:13;

The proposed development occurs within the 100-year floodplain of the Delaware River; thus a FHACA Permit is required. An application for a FHACA Individual Permit will be submitted to NJDEP concurrently with the Waterfront Development, Coastal Wetlands and Freshwater Wetlands Permit application for the proposed activities. Construction will not commence prior to receiving the FHACA permit; therefore, this condition is met.

(b)11. The Project is otherwise lawful;

The proposed project will be constructed and operated in accordance with applicable Federal, State, and local laws, regulations and ordinances.

(b)12. The project is in the public interest, as determined by the Department in consideration of the following:

i. The public interest in preservation of natural resources and the interest of the property owners in reasonable economic development. In determining whether a proposed activity is in the public interest, the Department shall consider, as one source of guidance, the goals, strategies, policy objectives and policies of the New Jersey State Development and Redevelopment Plan, adopted and/or readopted by the State Planning Commission pursuant to the New Jersey State Planning Act, N.J.S.A. 52:18A-196 et seq., and the State Planning Act rules, N.J.A.C. 17:32;

The site is within a Metropolitan Planning Area, in which the State Plan's intention is to provide for much of the state's future redevelopment. One strategy for achieving this goal includes brownfields redevelopment. The site, which was a munitions and chemical manufacturing facility for over 100 years, is undergoing remediation so that it can be redeveloped as an intermodal port facility (NJSPC 2001).

As stated in the New Jersey State Development and Redevelopment Plan (March 2001):

> The Strategic Importance of New Jersey's Ports: As expansion of the global economy increases the importance of import and export activity, the ports of Newark and Elizabeth as well as the Delaware River ports will become critical to New Jersey's economic future. Businesses such as custom freight brokering, international banking, motor and rail freight, warehousing and distribution will benefit from this globalization.

Under existing conditions, ports in the South Jersey/Southeastern Philadelphia Region are operating at near maximum capacity, with ships being turned away in 2006 and 2007 due to lack of available berth space to handle additional ships and cargo. The redevelopment of the Project Site into an intermodal port facility would address a portion of the need for additional berths in Delaware River Region by utilizing existing infrastructure located in a previously disturbed industrial setting, which reduces environmental impacts as much as possible while revitalizing a longstanding brownfields site.

As also discussed in the annexed Alternatives Analysis (Appendix D), this project balances the public interest in preservation of natural resources and the interest of both the property owners and the surrounding community in reasonable economic development. In the interest of preserving natural resources, the project footprint has been significantly reduced from its initial conception and refined to reduce impacts to wetlands to the maximum extent feasible given the water-dependent nature of the Marine Terminal and the need to accommodate transit warehousing, longer-term storage, and the internal circulation attendant to the site use as an international logistics center. The revised project layout clusters development in previously disturbed areas wherever possible, utilizes existing infrastructure to avoid additional disturbance, and specifically avoids impacts to the Central Forest, a large forested wetland complex in the central portion of the site. In light of the care taken to accommodate the public interest in both the environmental preservation and revitalization of this once economically productive industrial facility, this condition is met.

ii. The relative extent of the public and private need for the proposed regulated activity;

As described in response to the preceding compliance objective and the Alternatives Analysis (Appendix D), there is a demonstrated need for additional port facilities that can serve the region. Additionally, the Project Site was the economic driver of the local community, Gibbstown, for over 100 years. At the height of organics production in the mid-1960s, the DuPont Repauno Works facility employed over 2,000 people (Appendix J). When the facility ceased organic manufacturing operations in 1985, a significant job base and tax revenue was lost. Restoring this site to a viable commercial operation will return jobs and revenue the local, state, county and regional economy.

As previously discussed in Sections 1 through 6 hereof, the project represents a unique opportunity to return a former industrial facility to productive use in order to respond to the market need for additional port facilities in a location that is attractive to commercial users based on the proximity to the Federal navigation channel of the Delaware River, the limited amount of new dredging required to access the berthing area, the presence of existing rail access, the proximity to highways for the transport of imported goods, and the absence of logistical and technological barriers to redevelopment.

Given the private and public need for this brownfields redevelopment project, this condition is met.

iii. Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods, to accomplish the purpose of the proposed regulated activity;

As described in Section 2 of the Alternatives Analysis (Appendix D), other alternative locations were considered, but were not suitable for the proposed project. Accordingly, this condition is met.

iv. *The extent and permanence of the beneficial or detrimental effects which the proposed regulated activity may have on the public and private uses for which the property is suited;*

This 1630-acre property has been in private ownership for 150 years and the majority of it was used for industrial purposes for over 100 years. The majority of industrial operations ceased in the mid-1980s and the site has been underutilized since that time. The redevelopment of the site as a port facility is a long-term investment, not only in the property itself, but in the local community, county, state, and region. The redevelopment will have long-term economic benefits for the community and impacts to wetland areas of been avoided or minimized to the greatest extent practicable to meet project demands. Accordingly, this condition has been met.

v. *The quality and resource value classification pursuant to N.J.A.C. 7:7A-2.5 of the wetland which may be affected and the amount of freshwater wetlands to be disturbed;*

A wetland delineation identified 48 acres of freshwater wetlands on the Project Site. In addition, 46 acres of coastal wetlands and 20 acres of State Open Waters were identified on the Project Site. Wetland boundaries were verified by a Letter of Interpretation (LOI) issued by NJDEP on July 11, 2016 (DLUR No. 0807-16-000.1 FWW16001).

The selected project configuration requires the filling of approximately 8 acres of freshwater wetlands, 6 acres of coastal wetlands, and 0.39 acres of State Open Waters. Approximately 47 acres of freshwater and coastal wetlands transition area will also be impacted. These impacts reflect that some wetland areas will be filled in connection with NJDEP-approved remediation activities that will be completed at the site before certain development activities commence.[14] The resource value classification of the affected wetlands is summarized in Table1.

As discussed in the Alternatives Analysis (Appendix D), the selected project layout clusters development in previously disturbed areas wherever possible and utilizes existing infrastructure to avoid additional disturbance. The project was designed to specifically avoid the Central Forest, a large forested wetland complex in the central portion of the site. Exceptional and intermediate resource value wetlands providing high quality habitat were avoided to the maximum

[14] Based on the FWW, CZM, FHA permit application submitted for the Nitrobenzene Area remediation (DLUR File No. 0807-06-0002.1, CZM160001, FHA 160001, FWW 160002) and the FWW, CZM permit application received for the Redevelopment Area Interim Remedial Measures (DLUR File No. 0807-06-0002.1, FWW160007, CZM160003), these impacts are approximately 2 acres.

extent practicable. Unavoidable wetlands impacts associated with the project will be mitigated as required under FWPA Rules.

vi. *The economic value, both public and private, of the proposed regulated activity to the general area;*

As described in response to the previous compliance objectives and in the Alternatives Analysis (Appendix D), there is a demonstrated need for additional port facilities that can serve the region. Additionally, the Project Site was the economic driver of the local community, Gibbstown, for over 100 years. At the height of organics production in the mid-1960s, the DuPont Repauno Works facility employed over 2,000 people (See Appendix J). When the facility ceased organic manufacturing operations in 1985, a significant job base and tax revenue was lost. Restoring this site to a viable commercial operation will return jobs and revenue the local, state, county and regional economy.

Based on preliminary estimates by the applicant, the development of the Marine Terminal will bring a new engine of economic growth to the community. Depending on the ultimate configuration of the project and particular end uses, at its maximum build-out over the next several years, the project is anticipated to create 500 to 1,000 construction jobs, and when fully operational, the facility at its maximum capacity is expected to provide full or part-time employment to approximately 500 to 1,000 people, as predicted by preliminary estimates internal to the applicant. The project will also create new tax revenue for its host community, providing a substantial boost to the local and regional economy. The project is also anticipated to spur incidental economic growth for to existing and new businesses that may be drawn to the region by opportunities created by the Marine Terminal. Accordingly, this requirement is met.

vii. *The functions and values provided by the freshwater wetlands and probable individual and cumulative impacts of the regulated activity on public health and fish and wildlife.*

Exceptional and intermediate resource value wetlands providing high quality habitat were avoided to the maximum extent practicable. Unavoidable wetlands impacts associated with the project will be mitigated as required under FWPA Rules. A brief description the characteristics and vegetation of each impacted wetland is provided in Table 1.

As discussed previously, a habitat assessment report was prepared to review the individual and cumulative effects of the proposed development on threatened and endangered species that may be present in onsite wetland areas. The conclusions of this report are summarized above. The full report is included as Appendix E.

(b)13. Will not involve a discharge of dredged material or a discharge of fill material, unless the material is clean, suitable material free from toxic pollutants in toxic amounts, which meets Department rules for use of dredged or fill material;

To construct the berth and access channel it is necessary to dredge approximately 457,000 cubic yards of sediment from the Delaware. As discussed in the Dredged Material Management Report (Appendix F), this sediment was sampled and characterized in accordance with a NJDEP-approved sampling plan. Sampling results identified the presence of benzo(a)pyrene, arsenic, and PCBs in excess of New Jersey Residential and Non-Residential Direct Contact SRS within the nearshore area. The SPLP composite results did not exceed the impact to groundwater leachate (SPLP) criterion in any sample, predicting no impact to groundwater. The results of this sampling have been used to determine the appropriate management options for the dredged material consistent with NJDEP requirements (See Appendix F).

Any soil imported to the site to raise site grades will meet NJDEP's residential soil remediation standards; therefore, this condition is met.

(b)14. Is consistent with the applicable approved Water Quality Management Plan (208 Plan) adopted under the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., unless the activities are not subject to the Department's Water Quality Management Planning rules at N.J.A.C. 7:15; and

The project site was included in the Gloucester County Wastewater Management Plan (N.J.A.C 7:15-5.25) and the project is consistent with that plan.

(b)15. In accordance with N.J.A.C. 7:7A-2.11, is part of a project that in its entirety complies with the Stormwater Management rules at N.J.A.C. 7:8.

A detailed Stormwater Management Plan has been developed to address the Stormwater Management Rules as stated at N.J.A.C. 7:8 (See Appendix G). Compliance with Stormwater Management Rules is discussed in the Stormwater Management Plan. The project will comply with all applicable rules at N.J.A.C. 7:8; therefore, this condition is met.

7.3 Additional Application Requirements for an Individual Freshwater Wetland Permit (N.J.A.C. 7:7A-10.6)

In addition to the basic information required for all applications in N.J.A.C. 7:7A-10.2, the application checklist for an individual freshwater wetlands or open water fill permit shall require the following information:

1. *The basic project purpose of the proposed activity, including whether it is water-dependent, as defined at N.J.A.C. 7:7A-1.4;*

The description and basic purpose of the project is provided in Section 5. The water-dependent nature of this project is described in Section 6.

2. *A line delineation LOI issued under N.J.A.C. 7:7A-3.3, or a line verification LOI issued under N.J.A.C. 7:7A-3.4, if an LOI of either type has been issued.*

   A line verification LOI has been issued; see Appendix C.

3. *Information regarding whether other approvals are required for the activities by Federal, interstate, State and local agencies for the activity; information regarding whether any such approvals or denials have been received; and information regarding whether the proposed activities are consistent with the rules, plans, or policies of other Federal, interstate, State and local agencies; and*

   See Section 2.4.

4. *If a site is known or suspected to be contaminated with toxic substances, and if the Department requests it, a laboratory analysis of representative samples of the sediment on the site.*

   See Section 3.2.

5. *A copy of the deed and/or other legal documents pertaining to the site;*

   See Appendix A.

6. *Information regarding special aquatic sites, public lands, critical habitat, and other relevant environmental features of the site; and*

   See Section 9.

7. *An alternatives analysis that meets the requirements at (b) below.*

   See Appendix D.

To ensure that the Department can evaluate all potential alternatives to a proposed project, the application checklist for an individual freshwater wetlands permit shall require an alternatives analysis that allows the Department to evaluate whether the requirements of N.J.A.C. 7:7A-7.2 are met, including, at a minimum the following:

1. *A description of all alternatives considered, including offsite alternatives as well as onsite alternatives that could minimize environmental impacts on the site, and the reasons for rejecting each alternative;*

   See Appendix D.

2. *Information regarding the history of the property as a whole, as necessary to evaluate the cost to the property owner of various alternatives. Such information may include:*

   i. *Document(s) showing when the property as a whole, as defined at N.J.A.C. 7:7A-1.4, was acquired and its purchase price;*

      See property deed in Appendix A.

ii. Documentation of any investments made to maintain and/or develop the property as a whole;

iii. Documentation of attempts by the property owner to sell the property or to obtain other property; and

The property was recently acquired by DRP, for the specific purpose of redeveloping the property into a multi-use, deep-water seaport and industrial logistics center. The site represents a compelling opportunity to redevelop an underutilized former industrial facility into a privately owned and operated marine terminal in one of the most active seaport markets in North America. This port facility will be suitable for handling break-bulk, bulk liquid and roll-on/roll-off (Ro-Ro) cargo. The unique features of this site in particular have resulted in a development plan that will allow a once productive industrial site to rise again as an economic driver for the community, state and region. Because of the site location, size and characteristics, this site is highly suitable for a multi-use, deep-water seaport and industrial logistics center.

3. Documentation of the environmental impacts of the proposed project, and of ways to minimize those impacts.

As presented in the alternatives analysis (Appendix D), the configuration of the port facility has been modified through the design process to minimize environmental impacts based on a delineation of wetlands and identification of protected resources. A conceptual mitigation plan has been prepared to present potential mitigation options for wetland impacts. A protected species monitoring and management plan has been prepared to minimize and mitigate impacts to protected species (See Appendix E.)

7.4 Special Activity Transition Area Waiver (N.J.A.C. 7:7A-6.3)

(a) The Department shall issue a transition area waiver for certain special activities meeting the criteria in this section. However, the Department will issue a special activity waiver under this section only if the activities will not result in a substantial impact on the adjacent freshwater wetlands, and the proposed project will minimize impacts to the freshwater wetland and transition area.

(g) The Department shall issue a special activity transition area waiver for an activity if the applicant demonstrates that, if the activity were instead proposed in a freshwater wetland, it would meet the standards for a freshwater wetlands individual permit at N.J.A.C. 7:7A-7.2 and 7.4, and mitigation in accordance with N.J.A.C. 7:7A-15.26.

As shown on the Project Drawings, the proposed development will permanently impact approximately 45 acres of transition area from intermediate and exceptional resource value wetlands that fall outside of the limit of disturbance. Where project activities are proposed within transition areas of non-impacted wetlands, a transition area waiver is required. The development is being permitted under a FWPA Individual Permit; therefore, a special activity transition area for individual permits is applicable. Activities within these identified transition areas will be conducted in compliance with the general transition area waiver provisions (N.J.A.C. 7:7A-6.1). Mitigation for impacts to transition area identified above is discussed in Appendix H. Mitigation for

impacted areas will comply with the applicable requirements at N.J.A.C. 7:7A-15.26; therefore, this condition will be met.

8. STATEMENT OF COMPLIANCE WITH FHA RULES

This section presents and describes compliance with applicable FHA rules. Only those policies from the FHA Rules that are potentially applicable are discussed in this regulatory compliance statement, including area-specific requirements for individual permits (N.J.A.C. 7:13-11) and activity-specific requirements for individual permits (N.J.A.C. 7:13-12). In each sub-section, the FHA Rule is summarized in italics followed by a statement of compliance or non-applicability of that policy.

8.1 Requirements for a Regulated Activity in Floodway (N.J.A.C. 7:13-11.3)

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a floodway.

No mapped floodway for the Delaware River is shown on the current FEMA FIRM Map Panel (No. 34015C0058E) for the Project Site (see Figure 6); therefore, per N.J.A.C. 7:13-3.4(d)2.ii, the floodway limit shall be equal to the limits of the channel.

(c) ...the Department shall issue an individual permit for the following regulated activities in a floodway, provided all other requirements of this chapter are satisfied for each activity:

(c)7. The placement of dredged material adjacent to the water from which the material was removed, in accordance with N.J.A.C. 7:13-11.15(f);

The applicant proposed to dredge a 29-acre area in the Delaware River to a depth of 40 feet below MLLW (see Drawing D-101). Placement of dredge materials on land will comply with all applicable FHA rules; therefore, this condition is met. Further discussion of dredged materials management is provided in Appendix F.

8.2 Requirements for a Regulated Activity in Flood Fringe (N.J.A.C. 7:13-11.4)

The proposed regulated activities are located within the tidal flood hazard area of the Delaware River and are therefore exempted from the requirements under this section, in accordance with N.J.A.C. 7:13-10.4(d)1.

8.3 Requirements that Apply to All Regulated Activities (7:13-12.1)

As required at N.J.A.C. 7:13-11.1(b), the proposed project will meet the following conditions as described below:

(b) The Department shall issue an individual permit for a regulated activity only if it determines that the regulated activity is not likely to cause significant and adverse effects on the following:

1. Water quality;

As discussed in Appendix F, BMPs, including methods to minimize sediment resuspension, and monitoring will be utilized during the proposed activities to minimize effects on water quality. In addition, appropriate sediment and erosion control measures will be implemented for upland activities to minimize the discharge

of sediment runoff to the Delaware River and other nearby waterways. Therefore, the proposed activities will not significantly adversely affect water quality in the project area.

2. Aquatic biota;

No in-water work related to the removal of sediments or in-water construction of the wharf will take place during the restricted time period (between March 1 and July 15) to be protective of migratory fish species. BMPs will be used during dredging and demolition activities to minimize the potential for resuspension of sediment so as to not increase turbidity or negatively impact water quality in the migratory pathways.

Fill within of several on-site permitted waste treatment system ditches is proposed as part of the marine terminal development. As discussed in Section 4.4.1, on-site ditches provide poor-quality, limited habitat for aquatic biota; therefore, fill within these ditches is not expected to cause significant adverse impacts to aquatic biota.

3. Water supply;

The Project Site is connected to the Greenwich Township water supply and also receives water from two on-site wells. These production wells support facility maintenance and remediation activities, and operate under a Water Allocation Permit. Development activities are not anticipated to adversely impact the existing on-site water supply well; therefore, this condition is met.

4. Flooding;

The project site is within the tidal flood zone of the Delaware River. The proposed dredging and wharf construction activities, including fill below MHW, are not expected to change these conditions or affect the flood capacity of the River.

Filling of development areas is also proposed in order to raise site grades. Filling within a tidal flood zone is not subject to flood storage volume displacement limits.

5. Drainage;

The proposed project involves work below the MHW, including dredging and wharf construction and fill within wetlands and other areas below the Ordinary High Water Mark (OHWM). The Project Site currently drains through a number of permitted waste treatment system ditches (see Section 4.5.1). During construction, site drainage will be redirected into newly constructed storm water facilities as determined in the Stormwater Report (Appendix G). Prior to beginning work, a Soil Erosion and Sediment Control Plan, approved by the Gloucester County Soil Conservation District will be implemented. In conjunction with this plan, the applicant will obtain a New Jersey Pollutant Discharge Elimination System (NJPDES) Stormwater Permit for construction activities. Monitoring and reporting of storm water quality will be implemented as may be required by that permit. A NPDES storm water permit will be obtained for the operating facility as well, and monitoring and reporting of storm water quality will be implemented as may be required by that

permit. Therefore, the project and will be constructed and operated in accordance with valid NJPDES permits.

Details of the storm water design and drainage plan for the site are discussed in the Stormwater Report, provided as Appendix G. Construction activities will not adversely affect drainage on the Project Site; therefore, this condition is met.

6. Channel stability;

The proposed work includes dredging within the Delaware River and the permanent placement of fill within portions of the Process Ditch, a permitted wastewater treatment ditch. Dredging will not adversely impact the channel of the Delaware River. The placement of fill within the Process Ditch is not expected to adversely impact the channel stability of unfilled downstream portions of the regulated water. Therefore, this condition is met.

7. Threatened and endangered species or their current or documented historic habitats;

See Section 8.10.4.

8. Navigation;

The Property boundary of the Project Site is located approximately 650 feet from the Delaware River main navigation channel. In-water activities related to the demolition and reconstruction of wharf areas is therefore not expected to adversely impact navigation within the Delaware River channel.

As shown on Drawing D-101, the proposed limit of dredging extends to within approximately 140 feet of the boundary Delaware River federal navigation channel. The Delaware River is approximately 3,100 feet wide at this location, providing vessels with adequate clearance to maneuver within the channel without disrupting ship traffic. Equipment utilized to perform dredging will not hinder navigation through the channel by other vessels.

As appropriate, information will be provided to the U.S. Coast Guard regarding in-water construction activities that may be of concern to navigation. Once developed, vessel traffic to and from the port will follow standard maritime requirements for navigation. Therefore, navigation will not be adversely affected by the proposed activities.

9. Energy production; and

No hydro-electric energy production occurs on the Delaware River in the vicinity of the proposed activities; therefore, energy production will not be adversely affected by the proposed remedial activities.

10. Fishery resources.

As discussed at Section 8.10.3 and 9.1.1, fishery resources will not be significantly adversely affected by the proposed activities.

(c) A permittee shall obtain all necessary approvals from the local Soil Conservation District or its designee prior to commencing any activity approved in an individual permit issued under this chapter.

Prior to beginning construction, a detailed SESC Plan for the proposed upland construction activities will be submitted to the Gloucester County SCD for certification. Work will not commence until the SESC Plan is certified by Gloucester County SCD; therefore, this condition is met.

(d) A permittee shall obtain all necessary approvals from the USDA Natural Resource Conservation Service or its designee prior to commencing any activity designed or overseen by the NRCS, which is approved in an individual permit issued under this chapter.

The proposed project is not designated by or under the oversight of the USDA Natural Resource Conservation Service; therefore, this condition does not apply.

(e) If neither the Soil Conservation District nor the USDA Natural Resource Conservation Service has jurisdiction over an activity approved in an individual permit issued under this chapter, the permittee shall commence the activity only if the following soil erosion and sediment control standards, as specified in the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90, are implemented:

The Gloucester SCD has jurisdiction over the project area. Prior to beginning construction, a detailed SESC Plan for the proposed upland activities will be submitted to the Gloucester County SCD for certification.

(f) The Department shall issue an individual permit for a regulated activity that adversely impact a property not owned by an applicant only if the applicant demonstrates that one or more of the requirements at N.J.A.C. 7:13-9.2(f) are satisfied for each adversely impacted property.

The proposed activities do not adversely affect properties not owned by the applicant.

8.4 Requirements for Stormwater Management (N.J.A.C. 7:13-12.2)

(b) The Department shall issue an individual permit for a regulated activity associated with a major development only if the requirements of the Stormwater Management rules at N.J.A.C. 7:8 are satisfied.

Stormwater management for the project has been designed to comply with N.J.A.C. 7:8. The proposed Wet Ponds have been designed in accordance with the New Jersey Stormwater BMP Manual at Chapter 9.11. The proposed manufactured treatment devices are in accordance with the New Jersey Stormwater BMP Manual at Chapter 9.6 and are listed in the latest NJCAT certification. Refer to the Stormwater Management Report supporting calculations.

(c) The Department shall issue an individual permit for a stormwater management basin located within or discharging within a flood hazard area only if the following requirements are satisfied:

1. *The basin is designed and constructed to function properly during both flood and non-flood conditions;*
2. *The effects of flooding and tailwater conditions on any proposed discharge are accounted for in the stormwater management calculations for the proposed basin. Tailwater conditions refer to situations where the discharge pipe will be submerged during a flood in such a way that floodwaters prevent the basin from draining properly. The effects of flooding and tailwater conditions are particular concern in the following cases:*
   - *i. The basin will be overtopped and flooded during the flood hazard are design flood, because it is not feasible to construct the emergency spillway in accordance with (c)3 below;*
   - *ii. The drainage area of the basin is similar in size to the drainage area of the water receiving the proposed basin;*
   - *iii. The basin reaches its maximum storage volume during or near the time flooding peaks within the water receiving the proposed discharge;*
   - *iv. The elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation;*
3. *If a basin is proposed within the flood hazard area, the emergency spillway shall be constructed above the flood hazard area design flood elevation where feasible, in order to prevent floodwaters from overtopping the berm and flooding the basin;*
4. *If the elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation, the discharge pipe shall be equipped with mechanical devices where appropriate to prevent floodwater from backing up the pipe into the basin.*

The entire site is located within a tidal flood hazard area with a design flood elevation, as approximated per Method 2, of elevation 10-ft (NAVD88) in the center of the property and elevation 9-ft everywhere else. The present grades range from a low elevation of 3-ft to a high elevation of 12-ft. The existing roads that provide access throughout the site are as low as elevation 4-ft, limiting the applicant's ability to raise site grades in the developed conditions above the design flood elevation. In the event of a flood, the entire tract and surrounding lands will flood, making it impractical to consider tailwater effects or to design the basins to function during flooding conditions. Stormwater management basins will be overtopped and flooded during the flood hazard area design flood because it is infeasible to construct the emergency spillways above the design flood elevation. Doing so would result in isolated flooding from surcharged inlets and trench drains in the paved areas that are below the design flood elevation. Since flooding conditions are tidally influenced, a direct relationship anticipate a direct relationship between the basin reaching its maximum storage volume and the downstream flooding peaks. A check valve is proposed on all discharge pipes to prevent floodwater from backing up the pipe into the basins.

8.5 Excavation, fill and grading (N.J.A.C. 7:13-12.3)

(a) This section sets forth specific design and construction standards that apply to any excavation, fill and/or grading proposed in any regulated area.

(b) The Department shall issue an individual permit for excavation, fill, and/or grading only if the following requirements are satisfied:

b(1) The overland flow of stormwater is not impeded and floodwater can freely enter and exit the disturbed area, unless the area is graded to impound water for a stormwater management structure that meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8;

The applicant will obtain a New Jersey Pollutant Discharge Elimination System (NJPDES) Stormwater Permit for construction activities and facility operations. Monitoring and reporting of stormwater quality will be implemented as may be required by that permit. The proposed development will be constructed and operated in accordance with valid NJPDES permits, such that the overland flow of stormwater is not obstructed. Additionally, a detailed Stormwater Management Plan has been developed to address the Stormwater Management Rules as stated at N.J.A.C. 7:8 (See Appendix G). Compliance with Stormwater Management Rules is discussed in the Stormwater Management Plan. The project will comply with all applicable rules at N.J.A.C. 7:8; therefore, this condition will be met.

b(2) Any slope greater than 50 percent (a ratio of two horizontal to one vertical) is stabilized using soil bioengineering, retaining walls, rip-rap or other appropriate slope protection;

As shown on Drawing D-101, a 2:1 slope will be established along the waterline at the wharf, from elevation -40 MLLW to the sheet pile wall. This proposed slope will be stabilized using appropriate slope protection; therefore, this condition will be met.

b(3) The excavation, fill, and/or grading does not endanger the integrity of any existing structure; and

The majority of structures remaining from operations of the former DuPont Repauno facility have been demolished or are proposed to be removed prior to the onset of Project activities. Existing structures to remain on the Project Site are shown on Drawing C-100. The proposed work will not endanger the integrity of existing structures identified to remain on the Project Site; therefore, this condition is met.

b(4) All excavated material is disposed of lawfully.

The proposed activities involve placement of fill to raise site grades. Excavation in uplands is not proposed; therefore, this condition does not apply.

8.6 Requirements for a structure (N.J.A.C. 7:13-12.4)

(a) This section sets forth specific design and construction standards that apply to any structure proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a structure only if the entire structure is designed and constructed to be suitably anchored in order to:

1. Resist impact from water and debris during the flood hazard area design flood;

2. Resist uplift, flotation, collapse and displacement due to hydrostatic and hydrodynamic forces resulting from the flood hazard area design flood;

3. Resist overturning and sliding pressure, as well as pressure from the freeze/thaw cycle of the soil; and

4. If the structure is located in or adjacent to a channel, resist undermining caused by channel erosion.

The proposed marine terminal includes reconstruction of the former wharf and in-water placement of breasting and mooring dolphins. The wharf and dolphins have been designed to resist impact from water and debris and will resist overturning and sliding pressure. In-water structures will be properly anchored to prevent any potential undermining that may occur through channel erosion. Refer to the design specifications on the Project Drawings for additional detail. This condition is met.

8.6.1 Requirements for a building (N.J.A.C. 7:13-11.5)

(a) This section sets forth specific design and construction standards that apply to any building proposed in the areas listed in [N.J.A.C. 7:13-11.5(b)]... Subsection (c) below established standards that apply to all buildings, and subsections (d) through (f) below provide additional standards for various types of buildings.

(c) The Department shall issue an individual permit to construct or reconstruct a building of any kind only if the following requirements are satisfied:

c(1). Any new building is located at least 25 feet from any top of bank or edge of water;

All proposed buildings are located at least 25 feet from any top of bank or edge of water; therefore, this condition is met.

c(4) ... Any exterior wall being constructed or reconstructed is designed to resist hydrostatic and hydrodynamic pressure caused by flooding up to the flood hazard area design flood elevation; and

Newly constructed buildings will be designed to withstand flooding pressures up to the F.F.E. elevation

(g) ... The Department shall issue an individual permit to construct a new habitable building only if the following requirements are satisfied:

g(4)...The lowest flood of any habitable building not identified in (g)1, 2, or 3...is set at least one foot above the flood hazard area design flood elevation, unless all of the following are satisfied:

i. The applicant demonstrates that it is not feasible to construct the lowest floor of any or all portions of the building at least one foot above the flood hazard design flood elevation;

ii. The lowest floor of the portions of the habitable building identified in g(4) above is constructed as close as feasible to one food above the flood hazard area design flood elevation; and

iii. An architect or engineer certified that the portions of the building identified in g(4)i above will be constructed in accordance with the flood-proofing requirements at (q) below.

Flood Hazard Area design flood elevations for the proposed buildings are shown in the Project Drawings. All buildings are constructed with a FFE at least 1 foot above flood hazard area design flood elevation.

(q) The Department shall issue an individual permit for a building that is flood-proofed only if one of the following requirements is satisfied:

The proposed buildings will be built at least one foot above the design flood elevation and thus do not need to be dry-flood proofed; therefore, this condition does not apply.

8.7 Requirements for a railroad, roadway, or parking area (N.J.A.C. 7:13-12.6)

(a) This section sets forth specific design and construction standards that apply to any railroad, roadway or parking area proposed in a flood hazard area.

(b) The Department shall issue an individual permit to construct or reconstruct a railroad or public roadway only if one of the following requirements is satisfied:

(b)1. The travel surface of the railroad or public roadway is constructed at least one foot above the flood hazard area design flood elevation; or

(b)2. The applicant demonstrates that it is not feasible to construct the travel surface of the proposed railroad or public roadway at least one foot above the flood hazard area design flood elevation pursuant to (g) below, and instead constructs the travel surface as close to this elevation as feasible.

Due to the volume of fill required to raise site grades to one foot above the flood hazard design flood elevation, it is not feasible to construct proposed rail travel surfaces at one foot above this elevation. Proposed travel surfaces will be constructed as close as feasible to one foot above the flood hazard design flood elevation.

(f)... The Department shall issue an individual permit to construct or reconstruct a private roadway and/or parking area that serves a building, or group of buildings, not covered by (c), (d) or (e) above, such as a commercial business, house of worship, office complex, shopping center or residential subdivision of two or more private residences, only if one of the following requirements is satisfied:

(f)1. The travel surface of each proposed private roadway and parking area that serve the building or group of buildings is constructed at least one foot above the flood hazard area design flood elevation;

(f)2. The applicant demonstrates the following:

i. Each building or group of buildings is already served by one or more roadways having a travel surface at least one foot above the flood hazard area design flood elevation, which is of adequate size and capacity to serve the building or group of buildings;

ii. The travel surface of each proposed roadway is constructed as close to one foot above the flood hazard area design flood elevation as feasible; and

iii. The travel surface of each proposed parking area is constructed at least one foot above the flood hazard area design flood elevation; or

(f)3. The applicant demonstrates the following:

i. It is not feasible to construct the travel surface of each private roadway and parking area at least one foot above the flood hazard area design flood elevation pursuant to (g) below;

ii. The travel surface of each private roadway and parking area is constructed as close to one foot above the flood hazard area design flood elevation as feasible;

iii. Every effort has been taken to provide some parking areas or sections of roadway in the overall development that are situated at least one foot above the flood hazard area design flood elevation so that vehicles can be moved to higher ground during a flood;

iv. No extraordinary risk is posed to any person using each private roadway or parking area that is constructed at an elevation less than one foot above the flood hazard area design flood elevation; and

v. An adequate number of permanent signs are posted in prominent locations indicating which private roadways and parking areas are subject to flooding in the following cases:

(1) The roadway and/or parking area serves a residential subdivision of two or more private residences; or

(2) The parking area has 10 spaces or more.

As shown on the (Drawings C-101 through C-123), some of the parking areas and access drives will not be constructed above the regulatory flood hazard area elevation. The majority of driveways will be situated at or above the flood hazard elevation; however, due to the existing road elevations, it is not feasible to construct all

driveways above the flood hazard elevation. All loading spaces and trailer stalls will be constructed no less than 1.5 feet below the flood hazard design elevation to ensure mobility and prevent water damage during flooding conditions. All parking areas consisting of 10 or more spaces constructed below the flood elevation will be signed pursuant to N.J.A.C. 7:13-12.6(f)v. We do not expect that the flood waters will pose an extraordinary risk to any person utilizing the area.

(g) An applicant seeking to demonstrate that it is not feasible to construct the travel surface of a railroad, roadway or parking area at least one foot above the flood hazard area design flood elevation, as is required for various activities in this section, shall prove that strict compliance with this requirement would result in one or more of the following:

(g)1. Prohibitively high construction costs;

(g)2. Construction costs that are disproportionately high compared with any benefit that would be obtained by strict compliance;

(g)3. A design that necessitates excessive volumes of fill that exceed the flood storage displacement limits at N.J.A.C. 7:13-10.4, for which flood storage cannot feasibly be created in compensation either onsite or offsite; and/or

(g)4. A design that causes unavoidable and adverse impacts to the environment (such as to the channel, riparian zone or fishery resources), or which would cause unavoidable and significant increases in the flood hazard area design flood elevation.

The existing grades along 'A' Line Road, 'C' Line road, and the rail are several feet below the flood hazard design elevation. Raising the private roadway and rail line above the design elevation would require a substantial amount of fill, resulting in significant construction costs and additional impact to undisturbed areas within wetlands and wetland transition areas.

8.8 Requirements for a Stormwater Outfall Structure (N.J.A.C. 7:13-12.9)

The Department shall issue an individual permit to construct or reconstruct a stormwater outfall structure only if the following requirements are satisfied (examples of acceptable designs are provided in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g)):

1. *The structure is built with a concrete headwall or flared-end section with footings that extend no less than three feet below grade;*

2. *The structure does not obstruct flow in a channel or floodway;*

3. *The structure includes adequate conduit outlet protection where required by the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;*

4. *If the structure includes a rip-rap apron, a three feet deep by three feet wide rip-rap toe wall is constructed at the end of the apron; and*

5. *The structure does not interfere with the normal flow of the channel or threaten to change the dimensions or location of the channel. For example, a large discharge of stormwater into a small channel, or a discharge situated at a significant angle to the normal flow in a channel, may cause the channel to move over time, interfere with the direction of flow and/or cause increased erosion or deposition of sediment within the channel.*

   All stormwater outfall structures will be built with a concrete head wall with footings that extend at least 3 feet below grade. The structures will include scour holes and/or riprap aprons designed in accordance to the New Jersey Standards for SESC Chapter 22. Stormwater management has been designed so that pre-existing flow rates from the 2-year and 10-year storm events are not increased in post-development conditions. All outfall structures have positioned to maintain the normal flow of the channels.

8.9 Requirements for removal of existing fill or an existing structure (N.J.A.C. 7:13-12.21)

(a) This section sets forth specific standards that apply to any proposed removal of existing fill or an existing structure in any regulated area.

(b) The removal of existing fill or an existing structure is subject to the requirements of this section only as follows:

(b)1. The fill or structure to be removed lies in a floodway;

The removal of derelict and dilapidated submerged structures within the Delaware River is required to reconstruct the former wharf and improve safety conditions.

(c) The Department shall issue an individual permit for the removal of existing fill or an existing structure as described in (b) above only if the following requirements are satisfied:

(c)1. All disturbed regulated areas are properly stabilized;

Channel stability is discussed at Section 8.3. All disturbed regulated areas will be adequately stabilized; therefore, this condition is met.

(c)2. If the removed fill or structure lies in a floodway, the applicant demonstrates through a hydraulic analysis that the removal will not adversely impact a property not owned by the applicant, pursuant to N.J.A.C. 7:13-11.1(f) and (g), unless it is clear to the Department that the proposed removal poses no threat to offsite properties;

As discussed in Section 5.2, dock infrastructure at the former wharf is in critical condition, with many components collapsed or nearing collapse. Removal of the structures will allow for repair of the wharf and will improve safety conditions. Removal will not adversely impact off-site properties.

(c)3. Any removed fill is disposed of in accordance with all applicable Federal, State and local laws;

Any fill removed from the wharf area will be reused on-site or disposed of lawfully at an appropriate disposal site; therefore, this condition is met.

(c)4. Any removed structure is disposed of outside of any regulated area and in accordance with all applicable Federal, State and local laws; and

Structures removed from the former pier will be disposed of lawfully at an appropriate disposal facility.

(c)5iii. All vegetation cleared, cut or removed in the riparian zone is replanted with indigenous, non-invasive species, except where the removed material is to be replaced by a new structure.

Clearing of vegetation within the riparian zone of the Delaware River is required to construct the multi-purpose berth. Activities related to the construction of the berth are regulated under the FHA rules and discussed in Section 8.6.

8.10 Environmental Report Requirements (N.J.A.C. 7:13-18.6)

This section addresses the requirements of the Environmental Report, including an analysis of potential adverse impacts in accordance with N.J.A.C. 7:13-18.6(a)3. The requirements specified at N.J.A.C. 7:13-18.6(a)1 and 2 are addressed elsewhere is this compliance statement.

8.10.1 Channels (N.J.A.C. 7:13-11.1)

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a channel.

(b) The Department shall issue an individual permit for a regulated activity in a channel only if the following requirements are satisfied:

1. The basic purpose of the project cannot be accomplished without the disturbance to the channel;

The proposed activities require dredging and demolition activities within the Delaware River (see Drawing D-101) and placement of fill within regulated portions of the Process Ditch (Drawings C-113 and C-115).

Dredging activities are required in previously dredged areas in order to ensure proper depths within the access channel to from the newly constructed Marine Terminal to the Delaware River navigation channel. Such access is critical to the development of a port facility. The removal of derelict and dilapidated submerged structures within the Delaware River is necessary to improve safety conditions, reconstruct the former wharf and operate the proposed water-dependent facility.

In addition, regulated portions of the Process Ditch must be filled in order to facilitate proper internal circulation between areas of the Marine Terminal. This would include the construction of rail lines and open storage areas within the area of the Process Ditch. These activities are required for the facility to

properly handle and transport cargo. Further, there is no practicable alternative to filling to raise site grades within these areas (see Appendix D).

The activities proposed within regulated channels are required to meet the basic purpose of the project; therefore, this condition is met.

5. Aquatic habitat is preserved where possible; and

6. Aquatic habitat is enhanced where preservation is not possible, such as through the placement of habitat enhancement devices, replacement of vegetation removed during construction, creation of tree canopy along the channel where no canopy exists and/or enhancement of existing tree canopy along the channel.

Dredging within a portion of the Delaware River is required, including in previously dredged areas, to make the proposed port accessible to vessel traffic from the federal navigation channel. The selected wharf location and project configuration substantially reduces the need for new dredging by taking advantage of an existing barge berth, thereby preserving aquatic habitat. In addition, the proposed wharf has been constructed within an open water layout in order to minimize impacts to the aquatic environment. Maintenance dredging within nearshore areas of the wharf is not expected to adversely impact aquatic habitat because this area has been repeatedly disturbed by historic dredging. Aquatic habitat has been preserved where possible; therefore, this condition is met.

Fill within the Process Ditch will not adversely impact southern sections of the channel which flow through a large, undisturbed forested wetlands complex. As discussed at Section 4.4.1, on-site permitted waste treatment system ditches provide limited, poor-quality habitat for aquatic biota. Infauna utilizing the Process Ditch are limited to highly tolerant species capable of withstanding harsh conditions. Therefore, fill within the Process Ditch is not expected to significantly adversely impact aquatic biota. Because the proposed activities are water dependent, mitigation for impacts to riparian vegetation are not required. Accordingly, this condition is met.

8.10.2 Riparian Zones (N.J.A.C. 7:13-11.2)

As described at N.J.A.C. 7:13-4.1, a riparian zone exists along every regulated water and includes the land and vegetation within each regulated water as well as the land and vegetation within a certain distance of the regulated water. The Delaware River is not a Category One Water[15], a trout production or trout maintenance water, and this segment of the River does not flow through an area that contains acid producing soils. While the Delaware River is listed in the NJ Natural Heritage Database and on NJDEP's Landscape Project as containing habitat for the federally endangered shortnose sturgeon, the United States Fish and Wildlife Service (USFWS) has not designated the River as critical habitat for this species indicating that the species is not critically dependent on the River for survival. Because the Delaware River in the project area does not meet any of these criteria, the riparian zone is 50 feet wide, as measured from the top of bank.

[15] Category One Waters are defined by the Surface Water Quality Standards at N.J.A.C. 7:9B.

As discussed in Section 4.5.2, additional on-site regulated waters include the E.L. Sluice Ditch and portions of the Process Ditch. While section of these features are listed in the NJ Natural Heritage Database and on NJDEP's Landscape Project as containing habitat for state threatened and endangered species, the species identified are bald eagle and osprey which are not critically dependent on the waterbody for survival. Both ditches flow through areas containing historic fill and are therefore not expected to contain acid-producing soils. Therefore, the riparian zone for the E.L. Sluice and Process Ditches is 50 feet wide, as measured from the top of bank.

(d) The following table sets forth limits on the area of vegetation that can be disturbed for various regulated activities, provided the requirements for each activity as described in (e) through (r) below are satisfied, and provided the applicant demonstrates the following:

1. The basic purpose of the project cannot be accomplished onsite without disturbing vegetation in the riparian zone;

2. Disturbance to the riparian zone is eliminated where possible; where not possible to eliminate, disturbance is minimized through methods including relocating the project, reducing the size or scope of the project and/or situating the project in portions of the riparian zone where previous development or disturbance has occurred;

3. All temporarily cleared, cut or removed vegetation within a riparian zone is replanted with indigenous, non-invasive vegetation upon completion of the project in accordance with (u) below; and

4. All additional restrictions for the specific proposed activity described elsewhere in this chapter are satisfied. For example, while (o) below sets limits on disturbance to the riparian zone resulting from a flood control project, N.J.A.C. 7:13-11.12 includes further specific requirements to ensure that disturbance to the channel and riparian zone is avoided or minimized for such project

The proposed project requires the disturbance of 7.22 acres of riparian zone along regulated waterways. Only a portion of this riparian zone is vegetated; however, as shown on Table C, "Maximum Allowable Disturbance to Riparian Zone Vegetation" in the FHACA Rules, there is no limit on disturbance to riparian zone vegetation for water dependent development activities, provided that the disturbance is justified. For water-dependent activities, the FHA Rules do not require mitigation for impacts to the riparian zone.

Clearing of vegetation within riparian zones is required to raise site grades in order to construct Marine Terminal infrastructure, buildings and storage facilities. These storage areas are critical to operation of the Marine Terminal as a commercial cargo staging, processing, and logistics facility. As discussed in the Alternatives Analysis, a number of alternate locations and internal site configurations were considered. The selected site configuration minimizes impacts to the riparian areas the maximum extent practicable (see Appendix D). Because the proposed riparian impacts involve permanent clearing and redevelopment within the riparian zone, restoration of cut or cleared vegetation is not feasible. Accordingly, these conditions are met.

(q)... The Department shall issue an individual permit for the construction of a water dependent development along a tidal water, which results in clearing, cutting, and/or removing vegetation in a riparian zone, only if the following requirements are met:

1. The development is designed in accordance with the Coastal Zone Management rules, N.J.A.C. 7:7E, and meets the definition of water dependent at N.J.A.C. 7:7E 1.8;

Refer to Section 9.2. The applicant is seeking a Waterfront Development Permit under the Coastal Zone Management Rules for the proposed water-dependent activities. Compliance with Coastal Zone Management Rules is discussed in Section 3.

2. No building is constructed within 25 feet of any top of bank or edge of water; and

No buildings will be constructed within 25 feet of any top of bank; therefore, this condition is met.

3. For any proposed development, the applicant demonstrates that there is no other feasible location onsite to construct the development, which would reduce or eliminate the impact to the riparian zone.

As discussed, development of riparian areas area critical to the operation of the Marine Terminal as a commercial cargo staging, processing, and logistics facility. As discussed in the Alternatives Analysis (Appendix D), a number of alternate locations and internal site configurations were considered. The selected site configuration minimizes impacts to the riparian areas the maximum extent practicable. There is no practicable alternative to the selected configuration of the project that would have a less adverse impact on vegetation within the riparian zone. Accordingly, this condition is met.

8.10.3 Fishery Resources (N.J.A.C. 7:13-11.5)

As discussed at Section 9.1.1, fishery resources will not be adversely affected by the proposed activities. Refer to Appendix E for analysis of potential impacts to endangered sturgeon species in the project area, and efforts to be undertaken by the applicant to avoid potential impacts to this species.

8.10.4 Threatened or Endangered Species (N.J.A.C. 7:13-11.6)

The Project Site contains habitat potentially suitable for bald eagle (State Endangered), osprey (State threatened) and northern long-eared bat (Myotis septentrionalis). Atlantic sturgeon and shortnose sturgeon (federally endangered) habitat has been identified within the Delaware River generally. Refer to Appendix E for a detailed analysis of the suitable habitat, potential impacts, and affected habitat for these species.

Through avoidance, minimization, and mitigation measures, no adverse impacts to threatened and endangered species or their habitat are expected as result of the Project.

- Bald eagles and osprey nests within or near the Project Site will be protected or relocated and mitigation for potential disturbance will include building nesting platforms,

burying high voltage powerlines, and developing a management plan to protect bald eagle and osprey nests.

- Northern long-ear bats are unlikely to be present, but tree removal in areas of potential roosting habitat will be avoided during pup season from June 1 through July 31.
- Atlantic and shortnose sturgeon may forage or migrate through areas of the Delaware River disturbed by in-water work. Impacts to sturgeon will be avoided by conducting work within the recommend construction window and implementing mitigation measures and dredging best management practices.

Further, the loss of threatened and endangered species habitat mapped by the landscape project is not expected to adversely impact species due to the low quality of the abitat and the availability of ample high quality habitat adjacent to the Project Site.

9. COMPLIANCE WITH COASTAL ZONE MANAGEMENT RULES

This section presents and describes compliance with the applicable Coastal Zone Management Rules in subchapters 9, 12, 13, 14, 15, and 16 (N.J.A.C. 7:7). Table 4 identifies Coastal Zone Rules in subchapters 9, 12, 14, 15, and 16 and indicates which are potentially applicable to the proposed project. Only those rules which are potentially applicable are discussed in this compliance statement. In each sub-section, the coastal rule is summarized in *italics* and followed by a statement of compliance or non-applicability of that rule.

9.1 Compliance with Coastal Zone Management Rules on Special Areas

9.1.1 Finfish Migratory Pathways (N.J.A.C. 7:7-9.5)

Finfish migratory pathways are waterways (rivers, streams, creeks, bays and inlets) which can be determined to serve as passageways for diadromous fish to or from seasonal spawning areas, including juvenile anadromous fish which migrate in autumn and those listed by H.E. Zich (1977) "New Jersey Anadromous Fish Inventory" NJDEP Miscellaneous Report No. 41, and including those portions of the Hudson and Delaware Rivers within the coastal zone boundary.

Development, such as dams, dikes, spillways, channelization, tide gates and intake pipes, which creates a physical barrier to the movement of fish along finfish migratory pathways is prohibited, unless acceptable mitigating measures such as fish ladders, erosion control, or oxygenation are used. Development which lowers water quality to such an extent as to interfere with the movement of fish along finfish migratory pathways or to violate State and Delaware River Basin Commission water quality standards is prohibited.

Based on a review of available data from the National Marine Fisheries Service (NMFS), the Project Site does not contain any designated Essential Fish Habitat (EFH). In addition, no critical habitat has been designated for the federally-endangered shortnose sturgeon or Atlantic sturgeon.

Several species of anadromous fish species are known to migrate north through Delaware Bay and beyond to spawn, including American shad (*American shad (Alosa sapidissima)*, alewife *(Alosa pseudoharengus)*, blueback herring *(Alosa aestivalis)*, striped bass *(Morone saxatilis)*, hickory shad *(Alosa mediocris)*, gizzard shad *(Dorosoma cepedianum*), and white perch *(Morone americana)*. American eel (*Anguilla rostrata)* is also commonly found in the Lower Delaware River. NJDEP and the US Army Corps of Engineers restricts activities in waterfront activities where these species may be present between March 1 and July 15. A detailed analysis of potential impacts to sturgeon caused by proposed activities is provided in Appendix E.

The proposed project will not result in the creation of a physical barrier to the movement of fish through migratory pathways. A minor, temporary decrease in water quality may occur during in-water demolition and dredging activities, due to a potential increase in suspended solids as a result of disturbance of sediments. A list of BMPs to manage sediment resuspension and turbidity as a result of dredging is

presented in Appendix F. In addition, A Soil Erosion and Sediment Control Plan for upland work will be prepared and submitted to the Gloucester County Soil Conservation Board for approval prior to beginning work to reduce adverse impacts to water quality.

Dredging and demolition activities are not anticipated to have long-term adverse impacts on anadromous fish species. Furthermore, the proposed activities are not likely to interfere with the movement of fish along these pathways; therefore, the proposed activities comply with this rule.

9.1.2 Submerged Vegetation Habitat (N.J.A.C. 7:7-9.6)

A submerged vegetation special area consists of water areas supporting or documented as previously supporting rooted, submerged vascular plants such as widgeon grass (Ruppia maritima), sago pondweed (Potamogeton pectinatus), horned pondweed (Zannichellia palustris) and eelgrass (Zostera marina). Other submerged vegetation species in lesser quantities include, but are not limited to, the following: water weed (Elodea nuttalli, Eriocaulon parkeri, Liaeopsis, chinesis, Naja flexilis, Nuphar variegatum, Potamogeton crispus, Potamogeton epihydrus, Potamogeton perfoliatus, Potamogeton pusillus, Scirpus subterminalis and Vallisneria Americana).

4. *Development in submerged vegetation habitat is prohibited except for the exceptions listed at N.J.A.C. 7:7-9.6(b).*

A preliminary submerged aquatic vegetation (SAV) survey was conducted by Amy S. Green Environmental Consultants, Inc. (ASGECI) in December 2015 to determine of SAV may be present within the Project Site. A total of 16 sample stations were established along seven transects on the western and eastern sections of the wharf areas where in-water activities are proposed to occur. At each sample station, ASGECI biologists collected 8-10 benthic samples using a hand-rake to determine if SAV was present. The preliminary survey did not detect any clear beds of SAV during the study. Based on the presence of rooted SAV samples collected on the eastern portion of the study area section, it was determined that shallow portions of the study area may have the potential for rooted SAV. Nearly all SAV sampled collected consisted of water celery (*Vallisneria americana)*, a common species found in the lower Delaware River system. A copy of the survey report is provided as Appendix I.

A follow-up SAV survey will be conducted to determine of beds of SAV are present within the project area and if so determine the extent. A report will be submitted when that survey is completed.

The project activities include maintenance dredging within the nearshore area of an existing berth. The eastern portion of the SAV study area identified as potentially suitable for SAV beds is not within the limits of dredging. The location of the proposed Marine Terminal utilizes a former industrial port constructed in approximately 1950 for use by the DuPont Repauno facility, and the barge berth is to be located in a previously dredged area, thereby minimizing total amount of dredging required. Due to the extensive history of dredging disturbance within the nearshore area around the existing berth, the proposed activities are not expected to adversely impact SAV within the dredging limits.

In addition, the project also proposes to replace the existing dock with an expanded, newly constructed wharf. The wharf is designed with an open construction layout to avoid impacts to the Delaware River, including impacts to SAV. Design modifications to the wharf, including substituting breasting and mooring dolphins for wharf structure, reduced the length of and overall structural footprint over water; thereby avoiding potential shallow areas of SAV to the east of the wharf.

While the proposed activities are located within a former industrial port, the facility was not a previously authorized operating marina and therefore, does not meet the six exceptions which conditionally allow new or maintenance dredging in submerged vegetation habitat. However, the Coastal Management Program and the CZM rules are founded on eight broad coastal goals described at N.J.A.C 7:7-1.1(c). As stated at N.J.A.C. 7:7-1.1(c)4, the Coastal Management Program supports the goal of sustaining and revitalizing water-dependent uses, including the redevelopment of inactive and under-utilized waterfront facilities for port uses. Policies which support the redevelopment of port uses are summarized below.

Port Related Policies as stated at N.J.A.C. 7:7-1.1(c)4

i. Encourage, sustain and enhance active port and other water-dependent facilities, and maritime uses;

ii. Encourage the redevelopment of inactive and under-utilized waterfront facilities for port, water-dependent and maritime uses;

iii. Conserve waterfront sites for water-dependent activities; and

iv. Manage dredging in an environmentally sound manner, promote environmentally sound and economically feasible dredged material management practices and preserve historic dredged material placement sites;

The proposed port project satisfies the above-referenced goals by redeveloping and enhancing an inactive and underutilized industrial port for water-dependent uses, thereby conserving alternative waterfront locations. As discussed above, given the history of dredging and industrial operations conducted at the former wharf, impacts to SAV are expected to be negligible.

5. *Development in upland or water areas adjacent to submerged vegetation habitat or in submerged vegetation habitat which results in erosion or turbidity increases in the waters supporting submerged vegetation or prop or hull scour through use of the development is prohibited unless mitigating measures are provided.*

Disturbance in uplands adjacent to potential SAV habitat will be managed using appropriate soil erosion and sediment control procedures. Upland development adjacent to the Delaware River will not contribute a significant increase in erosion or turbidity to waters supporting SAV; therefore, this condition is met.

9.1.3 Navigation Channels (N.J.A.C. 7:7-9.7)

Navigation channels are tidal water areas including the Atlantic Ocean, inlets, bays, rivers and tidal guts with sufficient depth to provide safe navigation. Navigation channels include all areas between the top of the channel slopes on either side. These navigation channels

are often marked with buoys or stakes. Major navigation channels are shown on NOAA/National Ocean Service Charts. Development which would cause terrestrial soil and shoreline erosion and siltation in navigation channels shall utilize appropriate mitigation measures. Development which would result in loss of navigability is prohibited. Any construction which would extend into a navigation channel is prohibited.

In order to provide access to vessels traveling within the Delaware River Federal Navigation Channel, dredging is proposed within the project area to a depth of -40 feet MLLW plus one (1) foot overdredge (See Drawing D-101). The limits of dredging occur approximately 140 feet from the Delaware River navigation channel. The River is approximately 3,100 feet wide at this location, providing is adequate room for ships to safely navigate within the channel. Wharf demolition and construction activities occur approximately 650 feet away from the navigation channel and are not expected to adversely impact navigation of vessels within the Delaware River.

The proposed in-water activities will not adversely affect navigation of vessels within the Delaware River; therefore, this condition is met.

9.1.4 Ports (N.J.A.C. 7:7-9.11)

Ports are water areas having, or lying immediately adjacent to, concentrations of shoreside marine terminals and transfer facilities for the movement of waterborne cargo (including fluids), and including facilities for loading, unloading and temporary storage. Port locations in New Jersey include, among others, Newark, Elizabeth, Bayonne, Jersey City, Weehawken, Hoboken, Woodbridge, Perth Amboy, Camden, Gloucester City, Paulsboro and Salem. Any use which would preempt or interfere with port uses of this water area is prohibited.

The nearest port facility is Port of Paulsboro, located approximately four miles east of the project area. The proposed project will not interfere with existing port uses; therefore, the proposed activities comply with this rule.

9.1.5 Submerged Infrastructure Routes (N.J.A.C. 7:7-9.12)

A submerged infrastructure route is the corridor in which a pipe or cable runs on or below a submerged land surface. Any activity which would increase the likelihood of infrastructure damage or breakage, or interfere with maintenance operations is prohibited.

No existing submerged pipelines or cables were identified on the Project Site during review of NOAA Nautical Chart No. 12312. Based on a review of available data on the National Pipeline Mapping System, liquid pipelines are present south of the Project Site in Greenwich Township. The locations of existing onsite underground pipelines and cables that occur on land will be identified and avoided during construction activities. No known submerged infrastructure routes are located within the dredging area; therefore, the proposed activities comply with this rule.

9.1.6 Intertidal and Subtidal Shallows (N.J.A.C. 7:7-9.15)

Intertidal and subtidal shallows means all permanently or temporarily submerged areas from the spring high water line to a depth of four feet below mean low water. Development, filling, new dredging or other disturbance is discouraged but may be permitted in accordance with N.J.A.C. 7:7-9.15 (c), (d), (e), (f), (g) and (h) with N.J.A.C. 7:7-12.2 through 12.24.

(c) Maintenance dredging of intertidal and subtidal shallows is acceptable to maintain adequate water depths in accordance with N.J.A.C. 7:7-12.6.

(e) Mitigation shall be required for the destruction of intertidal and subtidal shallows in accordance with N.J.A.C. 7:7-17. Mitigation shall not be required for the following:

a. Filling in accordance with N.J.A.C. 7:7-12.11(c) and (f)1, 2, and 3;

b. Maintenance dredging in accordance with N.J.A.C. 7:7-12.6;

c. Beach nourishment in accordance with N.J.A.C. 7:7-15.11(f);

Within the project area, intertidal and subtidal shallows are present between the elevations of -6.82 ft. NAVD88 (which is four feet below mean low water) and 3.14 ft. NAVD88 (mean higher high water) as shown on Drawing D-101. Dredging within portions of the existing and newly constructed berth is proposed to occur within approximately 1.9 acres of intertidal/subtidal shallows. Mitigation for impacts to intertidal and subtidal shallows is discussed in Appendix H. Therefore, this condition is met.

9.1.7 Filled water's edge (N.J.A.C. 7:7-9.23)

(a) Filled water's edge areas are existing filled water, wetland, or upland areas lying between wetlands or water areas, and either (a) the upland limit of fill; or (b) the first paved public road or railroad landward of the adjacent water area, whichever is closer to the water:

(b) Filled water's edge areas shall be determined through analysis of historic data including United States Department of Agriculture soil surveys, Tidelands maps, or aerial photography. Some existing or former dredged material disposal sites and excavation fill areas are filled water's edge.

(c) *The "waterfront portion" is defined as a contiguous area at least equal in size to the area within 100 feet of navigable water, measured from the mean high water line. This contiguous area must be accessible to a public road and occupy at least 30 percent of its perimeter along the navigable water's edge.*

(d) On filled water's edge sites with direct water access (that is, those sites without extensive intertidal shallows or wetlands between the upland and navigable water), development shall comply with the following:

1. Except as provided below, the waterfront portion of the site shall be:

i. Developed with a water dependent use.

(e) On filled water's edge sites without direct access to navigable water, the area to bedevoted to water related uses will be determined on a case-by-case basis

(f) On filled water's edge sites with an existing or pre-existing water dependent use, that is, one existing at any time since July of 1977, development must comply with the following additional conditions:

1. 1. For sites with an existing or pre-existing marina, development that would reduce the area currently or recently devoted to the marina is acceptable if certain conditions are met.

2. For sites with an existing or pre-existing water dependent use other than a marina, development that would reduce or adversely affect the area currently or recently devoted to the water dependent use is discouraged.

Areas of the Project Site along the Delaware River waterfront are within the filled water's edge. Historically these areas were used for industrial purposes and have restricted public access due to health, safety and security concerns. The activities that will occur in the filled water's edge area are necessary to support the development of the Marine Terminal facilities and meet the definition of a water-dependent use, as defined at N.J.A.C. 7:7-1.4 (see Section 6.1).

The development proposed to occur in filled water's edge areas include water-dependent functions such as loading/offloading, processing, distribution, and break-bulk warehousing of waterborne cargo. Therefore, the requirements to preserve the project area's water-dependent uses is met.

Compliance with public access rules (N.J.A.C. 7:7-9.48) is discussed at Section 9.6.5.

9.1.8 Flood Hazard Areas (N.J.A.C. 7:7-9.25)

Flood hazard areas are areas subject to flooding from the flood hazard area design flood, as defined by the Department under the Flood Hazard Area Control Act (FHACA) rules at N.J.A.C. 7:13. Flood hazard areas include those areas mapped as such by the Department, areas defined or delineated as an A or a V zone by the Federal Emergency Management Agency (FEMA), and any unmapped areas subject to flooding by the flood hazard area design flood. Flood hazard areas are subject to either tidal or fluvial flooding. In a tidal flood hazard area below the mean high water line, this section shall apply only to the following activities: (1) development of habitable buildings; and (2) construction of railroads, roadways, bridges and/or culverts.

The Project Site is located within a tidal flood hazard area (see Figure 6) and is therefore subject to the FHACA Rules. An application for an Individual FHACA Permit is being submitted concurrently with this application. Compliance with FHACA requirements is presented in Section 8; therefore, this condition is met.

9.1.9 Riparian Zones (N.J.A.C. 7:7-9.26)

A riparian zone exists along every regulated water, except there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon, stormwater management basin, or oceanfront barrier island, spit or peninsula. Regulated waters are defined in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-2.2. The riparian zone includes the land and vegetation within each regulated water, as well as the land and vegetation within a certain distance of each regulated water. For a waterbody with discernable banks, such as the Hackensack River, the portion of the riparian zone that lies outside of a regulated water is measured landward from the top of bank and can be 50', 150' or 300' wide on both sides of the water body, depending on certain criteria.

Development in riparian zones shall conform with the requirements for a flood hazard area individual permit under the Flood Hazard Area Control Act rules.

Compliance with FHACA rules regarding regulated activities within the riparian zone is discussed at Section 8.10.2.

9.1.10 Wetlands & Wetlands Buffers (N.J.A.C. 7:7-9.27 and 9.28)

Wetlands or wetland means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

(b) Development in wetlands and wetlands buffer or transition area defined under the Freshwater Wetlands Protection Act is prohibited unless the development is found to be acceptable under the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A).

The proposed development requires fill of 8 acres of freshwater wetlands and 6 acres of coastal wetlands. In addition, approximately 47 acres of freshwater and coastal wetlands buffer area will be impacted. These impacts reflect that some wetland areas will be filled in connection with NJDEP-approved remediation activities that will be completed at the site before certain development activities commence. [16] An application for an Individual Freshwater Wetlands Protection Act Permit is being submitted concurrently with this application to address impacts to freshwater wetlands; therefore, this condition is met.

(i) If an application to disturb or destroy wetlands meets the standards for permit approval, the Department will require the applicant to mitigate for the loss or degradation of the wetlands in accordance with N.J.A.C. 7:7-17.

A mitigation proposal that presents concepts to compensate for impacts to coastal and freshwater wetlands is provided in Appendix H. After initial review of the mitigation proposal by NJDEP, a mitigation plan will be prepared that meets the requirements at N.J.A.C. 7:7-17 and N.J.A.C. 7:7A-15; therefore, this condition will be met.

9.1.11 Historic and Archaeological Resources (N.J.A.C. 7:7-9.34)

Historic and archaeological resources include objects, structures, shipwrecks, buildings, neighborhoods, districts, and man-made or man-modified features of the landscape and seascape, including historic and prehistoric archaeological sites, which either are on or are eligible for inclusion on the New Jersey or National Register of Historic Places.

Development that detracts from, encroaches upon, damages, or destroys the value of historic and archaeological resources is discouraged.

Development that incorporates historic and archaeological resources in sensitive adaptive reuse is encouraged.

Scientific recording and/or removal of the historic and archaeological resources or other mitigation measures must take place if the proposed development would irreversibly and/or adversely affect historic and archaeological resources.

[16] Based on the FWW, CZM, FHA permit application submitted for the Nitrobenzene Area remediation (DLUR File No. 0807-06-0002.1, CZM160001, FHA 160001, FWW 160002) and the FWW, CZM permit application received for the Redevelopment Area Interim Remedial Measures (DLUR File No. 0807-06-0002.1, FWW160007, CZM160003), these impacts are approximately 2 acres.

New development in undeveloped areas near historic and archaeological resources is conditionally acceptable, provided that the design of the proposed development is compatible with the appearance of the historic and archaeological resource.

A Phase IA Historic and Archaeological Assessment was completed for the Project by Hunter Research Inc., Historical Research Consultants. While the site has a long manufacturing history, it is not listed or eligible for listing on the New Jersey or National Register of Historic Places. The Phase IA Assessment is provided as Appendix J.

Several architectural resources in excess of 50 years in of age were identified; however, none of these properties are considered potentially eligible for inclusion in the New Jersey or National Historic Registers. Fieldwork and research also took into consideration whether there were any significant landscape features or viewsheds surrounding the project site that could be impacted by project activities. None were noted. No further architectural investigation is recommended. The proposed Gibbstown Logistic Center project is considered to have no potential to impact significant architectural resources. As stated in the Phase I Report, the documentary evidence of the DuPont Repauno Works, largely available at the Hagley Museum, already serves as a more substantial and complete record of the development of the site and the activities and processes that took place there than any further archaeological investigation could contribute.

Although a Native American archaeological site was previously documented within the Project Site at Thompson Point, this location and the property as a whole is assigned an overall low potential to yield significant Native American archaeological remains. This assessment is largely because of the extensive modifications made to the landscape over the last 130 years of industrial use and development. Thompson Point is also the location of a potential early historic site that may range in date from the late 17th through the19th century, however the historic archaeological potential of this location is also considered low for the same reasons.

One area that is considered to still hold archaeological potential is the Miller-Mullin Farm site located along C-Line Road in the southeastern portion of the Project Site. Based on the scope of the proposed project, this area cannot be avoided; therefore, a Phase 1B archaeological investigation and assessment is being conducted. The results of that study will be provided as soon as it is complete.

9.1.12 Endangered or Threatened Wildlife or Plant Species Habitats (N.J.A.C. 7:7-9.36)

Endangered or threatened wildlife or plant species habitats are terrestrial or aquatic areas known to be inhabited on a seasonal or permanent basis by or to be critical at any stage in the life cycle of any wildlife or plant identified as "endangered" or "threatened" species on official Federal or State lists of endangered or threatened species, or under active consideration for State or Federal listing. The definition of endangered or threatened wildlife or plant species habitats includes a sufficient buffer area to ensure continued survival of the

population of the species. Absence of such a buffer area does not preclude an area from being endangered or threatened wildlife or plant species habitat.

Areas mapped as endangered or threatened wildlife species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife (known hereafter as Landscape Maps) are subject to the requirements of this section unless excluded based on an Endangered or Threatened Wildlife Species Habitat Evaluation. Buffer areas, which are part of the endangered or threatened wildlife species habitat, may extend beyond the mapped areas.

Development of endangered or threatened wildlife or plant species habitat is prohibited unless it can be demonstrated, through an Endangered or Threatened Wildlife or Plant Species Impact Assessment as described at N.J.A.C. 7:7-11, that endangered or threatened wildlife or plant species habitat would not directly or through secondary impacts on the relevant site or in the surrounding area be adversely affected.

As discussed in Section 4, the Project Site contains habitat potentially suitable for bald eagle (State Endangered), osprey (State threatened) and northern long-eared bat (*Myotis septentrionalis*). Atlantic sturgeon and shortnose sturgeon (federally-endangered) habitat has been identified within the Delaware River. A Threatened or Endangered Habitat Impact Assessment (Appendix E) has been prepared in accordance with N.J.A.C. 7:7-11 to evaluate the potential effects of project activities to these species and their respective habitats.

Through avoidance, minimization, and mitigation measures, no adverse impacts to threatened and endangered species or their habitat are expected as result of the Project.

- Bald eagles and osprey nests within or near the Project Site will be protected or relocated and mitigation for potential disturbance will include building nesting platforms, burying high voltage powerlines, and developing a management plan to protect bald eagle and osprey nests.
- Northern long-ear bats are unlikely to be present, but tree removal in areas of potential roosting habitat will be avoided during pup season from June 1 through July 31.
- Atlantic and shortnose sturgeon may forage or migrate through areas of the Delaware River disturbed by in-water work. Impacts to sturgeon will be avoided by conducting work within the recommend construction window and implementing mitigation measures and dredging best management practices.

Further, the loss of threatened and endangered species habitat mapped by the landscape project is not expected to adversely impact species due to the low quality of the habitat and the availability of ample high quality habitat adjacent to the Project Site.

9.1.13 Critical Wildlife Habitats (N.J.A.C. 7:7-9.37)

Critical wildlife habitats are specific areas known to serve an essential role in maintaining wildlife, particularly in wintering, breeding, and migrating.

- *Rookeries for colonial nesting birds, such as herons, egrets, ibis, terns, gulls, and skimmers; stopovers for migratory birds, such as the Cape May Point region; and natural*

corridors for wildlife movement merit a special management approach through designation as a Special Area.

- *Ecotones, or edges between two types of habitats, are a particularly valuable critical wildlife habitat. Many critical wildlife habitats, such as salt marsh water fowl wintering areas, and muskrat habitats, are singled out as water or water's edge areas.*

Development that would directly or through secondary impacts on the relevant site or in the surrounding region adversely affect critical wildlife habitats is discouraged, unless:

(1) minimal feasible interference with the habitat can be demonstrated; (2) there is no prudent or feasible alternative location for the development; and (3) the proposal includes appropriate mitigation measures.

A search of the New Jersey Natural Heritage Database and the NJ Landscape Project identified foraging habitat for great blue heron (*Ardea herodias*), a state species of special concern, within the Project Site. No wintering, breeding, or migrating habitat for this species was identified on the Project Site. A breeding colony of heron was identified within one mile of the Project Site on Monds Island. A copy of the Natural Heritage Database search results are provided in Appendix E. Development activities will not adversely impact identified critical wildlife areas located outside of the project area; therefore, this condition is met.

9.1.14 Public Open Space (N.J.A.C. 7:7-9.38)

(a) Public open space constitutes land areas owned or maintained by State, Federal, county and municipal agencies or private groups (such as conservation organizations and homeowner's associations) and used for or dedicated to conservation of natural resources, public recreation, visual or physical public access or, wildlife protection or management. Public open space also includes, but is not limited to, State Forests, State Parks, and State Fish and Wildlife Management Areas, lands held by the New Jersey Natural Lands Trust (N.J.S.A. 13:1B-15.119 et seq.), lands held by the New Jersey Water Supply Authority (N.J.S.A. 58:1B-1 et seq.) and designated Natural Areas (N.J.S.A. 13:1B-15.12a et seq.) within DEP-owned and managed lands.

With the exception of a portion of the in-water work conducted in the Delaware River, the proposed activities will occur on privately owned land and is therefore not subject to public open space requirements at N.J.A.C. 7:7-9.38. As shown on Figure 1, the Property includes two tracts of land waterward of the MHW in the Delaware River. The State of New Jersey issued DuPont and the Atlantic City Electric Co. tidelands grants for these two areas during the period 1936-1958.

(g) All new development adjacent to public open space will be required to provide an adequate buffer area and to comply with the buffers and compatibility of uses rule, N.J.A.C. 7:7- 16.11. The buffer required will be dependent upon adjacent land uses and potential conflicts between users of public open space and the proposed adjacent land use.

Compliance with the rules on buffers is presented at 9.1.10 and 9.6.8.

9.1.15 Special Hazard Areas (N.J.A.C. 7:7-9.39)

Special hazard areas include areas with a known actual or potential hazard to public health, safety, and welfare, or to public or private property, such as the navigable air space around airports and seaplane landing areas, potential evacuation zones and areas where hazardous substances as defined at N.J.S.A. 58:10-23.11b-k are used or disposed, including adjacent areas and areas of hazardous material contamination.

Coastal development, especially residential and labor-intensive economic development, within special hazard areas is discouraged. All development within special hazard areas must include appropriate mitigating measures to protect the public health and safety.

Approvals from the Department's Solid and Hazardous Waste Program shall be obtained prior to the commencement of any hazardous substance investigations or cleanup activities at contaminated sites.

As discussed at Section 3.2 remediation is currently being performed by Chemours to address soil and groundwater contamination at the Project Site. Soil remediation activities within identified AOCs will be addressed prior to beginning construction within those AOCs. Groundwater will continue to be addressed on a site-wide basis by Chemours. Site hazards relating to contamination by previous owners will be managed and monitored according to the Remedial Action Workplan approved by NJDEP for the Project Site; therefore, the proposed activities comply with this rule.

9.1.16 Special Urban Areas (N.J.A.C. 7:7-9.41)

(a) Special urban areas are those municipalities defined in urban aid legislation (N.J.S.A. 52:27D-178) qualified to receive State aid to enable them to maintain and upgrade municipal services and offset local property taxes. Under N.J.S.A. 52:27D-178 et seq., the Department of Community Affairs (DCA) establishes a list of qualifying municipalities each fiscal year. DCA's list of qualifying municipalities may be obtained on request from the Department's Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.

(b) Development that will help to restore the economic and social viability of special urban areas is encouraged. Development that would adversely affect the economic well-being of these areas is discouraged, when an alternative which is more beneficial to the special urban areas is feasible. Development that would be of economic and social benefit and that serves the needs of local residents and neighborhoods is encouraged.

The project is located in Greenwich Township, which is not listed on the DCA's list of qualifying municipalities for FY 2016. However, the site has been identified as a Metropolitan Planning Area within *the New Jersey State Development and Redevelopment Plan*. The site, which was a munitions and chemical manufacturing facility for over 100 years, is undergoing remediation so that it can be redeveloped as an intermodal port facility. As stated in the New Jersey State Development and Redevelopment Plan (March 2001), *The Strategic Importance of New Jersey's Ports*:

> As expansion of the global economy increases the importance of import and export activity...the Delaware River ports will become critical to New Jersey's economic future.

The proposed port development will provide economic and social benefit that serves the needs of local residences and the surrounding region; therefore, the proposed activities comply with this rule.

9.1.17 Wild and Scenic River Corridors (N.J.A.C. 7:7-9.44)

(a) Wild and scenic river corridors are all rivers designated into the National Wild and Scenic Rivers System and any rivers or segments thereof being studied for possible designation into that system pursuant to the National Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1278). For rivers designated into the national system, the wild and scenic river corridor shall include the river and adjacent areas located within one-quarter mile from the mean high water line on each side of the river until a Federal River Management Plan has been adopted, after which time the wild and scenic corridor shall be the area defined in the adopted plan. For rivers under study for possible designation into the national system, the wild and scenic river corridor shall include the river and adjacent areas extending one-quarter mile from the mean high water line on each side of the river.

The portion of the Delaware River adjacent to the Project Site is not a designated Wild and Scenic River Corridor; therefore, this condition does not apply.

9.1.18 Geodetic Control Reference Marks (N.J.A.C. 7:7-9.45)

Geodetic control reference marks are traverse stations and benchmarks established or used by the New Jersey Geodetic Control Survey pursuant to P.L. 1934, c.116. The disturbance of a geodetic control reference mark is discouraged. When a geodetic control reference mark must be moved, raised or lowered to accommodate construction, the New Jersey Geodetic Control Survey shall be contacted at least 60 days prior to disturbance and arrangements shall be made to protect the position.

Based on a review of available data from the National Geodetic Survey, four horizontal geodetic control reference marks are located on the Project Site (see Table 5):

The location of geodetic control reference marks on the Project Site will be noted and care will be taken to leave the reference mark undisturbed. If disturbance is required, the New Jersey Geodetic Control Survey will be contacted to address the potential disturbance. Therefore, the proposed activities comply with this rule.

9.1.19 Lands and Water Subject to Public Trust Rights (N.J.A.C. 7:7-9.48)

Lands and waters subject to public trust rights are tidal waterways and their shores, including both lands now or formerly below the mean high water line, and shores above the mean high water line. Tidal waterways and their shores are subject to the Public Trust Doctrine and are held in trust by the State for the benefit of all the people, allowing the public to fully enjoy these lands and waters for a variety of public uses.

Public access to lands and waters subject to public trust rights shall be provided in accordance with the public access rule, N.J.A.C. 7:7-16.9. Development that does not comply with N.J.A.C. 7:7-16.9, Public access, is discouraged in lands and water subject to public trust rights.

By previously issued tidelands grants, the State of New Jersey has conveyed its ownership of a portion of the tidelands located adjacent to the Site to the upland owner (see property deed in Appendix A). Public access is discussed in Section 9.6.5; therefore, the proposed activities will comply with this rule.

9.2 Compliance with Coastal Zone Management Rules on General Water Areas (N.J.A.C. 7:7-12)

N.J.A.C. 7:7-12.2 through 12.24 set forth the requirements for specific types of development within general water areas as defined at (a) above. In many cases an area already identified as a special area will also fall within the definition of a general area. In these cases, both general and special area rules apply. In case of conflict between general and special area rules, the more specific special area rules shall apply.

9.2.1 Docks and piers for cargo and commercial fisheries (N.J.A.C. 7:7-12.4)

(a) Docks and piers for cargo and passenger movement and commercial fisheries are structures supported on pilings driven into the bottom substrate or floating on the water surface, used for loading and unloading passengers or cargo, including fluids, connected to or associated with, a single industrial or manufacturing facility or to commercial fishing facilities.

(b) Docks and piers for cargo and passenger movement and commercial fisheries are conditionally acceptable provided:

1. The width and length of the dock or pier is limited to only what is necessary for the proposed use;

The selected wharf design utilizes breasting and mooring dolphins to reduce the length of docking required to accommodate ships up to 850 feet in length; therefore, this condition is met. See Alternatives Analysis (Appendix D) for additional detail.

2. The dock or pier will not pose a hazard to navigation. A hazard to navigation includes all potential impediments to navigation, including access to adjacent moorings, water areas and docks and piers; and

See Section 9.1.3.

3. The associated use of the adjacent land meets all applicable rules of this chapter.

See Section 9.6.8.

(c) The standards for port uses are found at N.J.A.C. 7:7-15.9. The standards for the construction of a dock or pier composed of fill and retaining structures are found at N.J.A.C. 7:7-12.11.

Port uses are discussed at Section 9.5.2.

9.2.2 Maintenance dredging (N.J.A.C. 7:7-12.6)

(a) Maintenance dredging is the periodic removal of accumulated sediment from previously legally dredged navigation and access channels, marinas, lagoons, canals, or boat moorings for the purpose of safe navigation.

1. For a project to be considered maintenance dredging, the applicant shall demonstrate through historical data, including, but not limited to, previously issued dredging permits, previous dredging contracts, historic bathymetric surveys, and/or aerial photography that:

i. The proposed dredge area is limited to the same length and width as a previous dredging operation;

ii. The proposed water depth is the same as a previous dredging operation or as historical water depths within the proposed dredge area; and

iii. The proposed dredge area has historically been used for navigation or mooring of vessel requiring the proposed water depth.

DuPont constructed an inshore barge berth and offshore tanker berth between 1959 and 1969 (see Appendix D). A dredged depth of 36' MLLW was maintained in front of the offshore berth. In 1992, the USACE issued a blanket permit authorizing maintenance dredging of several areas, including the DuPont Repauno berths (Permit No. CENAP-OP-R-90-2427-1). The dredging plan authorized dredging to a depth of 35 feet in the offshore tanker berth and 20 feet in the inshore barge berth (USACE 1992).

Based on the previous depth and area of the former dredging operations, the majority of the proposed dredging is not maintenance dredging (see limits of previous dredging on Drawing D-101). Portions of the proposed dredging that do not qualify as maintenance dredging include, (a) dredging between approximately -36 feet and -40 feet MLLW, (b) dredging beyond the previous dredge limits of the former offshore and nearshore berths, as shown on 1992 Dredging Plan (see Drawing D-101).

(b) Maintenance dredging is conditionally acceptable to the authorized depth, length, and width within all general water areas to ensure that adequate water depth is available for safe navigation, provided:

1. An acceptable dredged material placement site, with sufficient capacity will be used (see N.J.A.C. 7:7-12.9, Dredged material disposal in water areas, N.J.A.C. 7:7-15.12, Dredged material placement on land, and Appendix G).

See Section 9.5.3 (dredged material placement on land).

2. Pre-dredging chemical and physical analysis of the dredged material, including water quality predictive analyses for surface water and ground water may be

required where the Department suspects contamination of sediments. Additional testing, such as bioaccumulation and bioassay testing of sediments, may also be required as needed to determine the acceptability of the proposed placement site for the dredged material. The results of these tests will be used to determine if contaminants may be resuspended at the dredging site and what methods may be needed to control their escape. The results will also be used to determine acceptability of the proposed dredged material placement method and site;

As discussed in Section 4.6, samples of sediments in the area to be dredged were collected for analytical testing, including bulk sediment chemistry (metals, pesticides, semi-volatiles, and PCB Aroclors) and Synthetic Precipitation Leaching Procedure (SPLP) analysis. Sampling results identified the presence of benzo(a)pyrene, arsenic, and PCBs in excess of New Jersey Residential and Non-Residential Direct Contact SRS within the nearshore area. The SPLP composite results did not exceed the Impact to GW Higher of the Health-based Leachate (SPLP) Criterion in any sample, predicting no impact to groundwater. The results of this sampling have been used to determine options for the appropriate dredged material placement method (See Appendix F).

3. Turbidity concentrations (that is, suspended sediments) and other water quality parameters at, downstream, and upstream of the dredging site, and discharges from dredged material management areas (see N.J.A.C. 7:7-9.49) shall meet applicable Surface Water Quality Standards at N.J.A.C. 7:9B. The Department may require the permittee to conduct biological, physical, and chemical water quality monitoring before, during, and after dredging and disposal operations to ensure that water quality standards are not exceeded;

Dredging activities will be performed using Best Management Practices to limit the potential for sediment resuspension and associated impacts on water quality. A list of sediment resuspension controls is provided in Appendix E. Through the implementation of BMPs and SESC measures, dredging activities are not anticipated to cause a violation of NJ water quality standards.

4. If predicted water quality parameters are likely to exceed Surface Water Quality Standards at N.J.A.C. 7:9B, or Ground Water Quality Standards at N.J.A.C. 7:9C, or if predredging chemical analysis of dredged material, including surface or ground water quality predictive analyses, reveals significant contamination, the Department will work cooperatively with the applicant to fashion acceptable control measures and will impose seasonal restrictions under specific circumstances identified at (c)7 below;

The applicant will comply with all applicable timing restrictions and control measures issued by the Department in the approved permits; therefore, this condition will be met.

5. For mechanical dredges, deploying silt curtains at the dredging site may be required, if feasible based on site conditions as provided in Appendix G. Where the

use of silt curtains is infeasible, dredging using closed watertight buckets or lateral digging buckets may be required. The Department may also require the use of additional best management practices when highly contaminated sediments are to be dredged in accordance with Appendix G;

While de minimis turbidity in the immediate vicinity of dredging operations is expected, if visual observations of turbidity suggest that turbidity may be increasing, the dredge process will be reviewed to ensure compliance with the BMPs, and corrective actions will be implemented, as needed. Initially, potential enhancements or modifications of BMPs will be evaluated, as described in Appendix F. If implementation of BMPs does not result in a reduction of turbidity, additional corrective actions may be implemented, including the implementation of structural controls (i.e., silt curtain). Therefore, this condition will be met.

6. For hydraulic dredges, specific operational procedures designed to minimize water quality impacts, such as removal of the cutter head, flushing of pipeline sections prior to disconnection, or limitations on depth of successive cuts, may be required;

The proposed dredging is expected to be completed using a mechanical dredge. However, in the event that hydraulic dredging is required, the contractor will be required to take the appropriate measures to limit the potential for impacts to water quality; therefore, this condition will be met.

7. The Department may authorize dredging on a seasonally restricted basis only, in waterways characterized by the following:

i. Known spawning, wintering or nursery areas of shortnose sturgeon, winter flounder, Atlantic sturgeon, alewife, blueback herring, striped bass, white perch or blue crab;

ii. Water bodies downstream of known anadromous fish spawning sites under N.J.A.C. 7:7- 9.5, Finfish migratory pathways, where the predicted turbidity plume will encompass the entire cross-sectional area of the water body, thus forming a potential blockage to upstream migration;

iii. Areas of contaminated sediments with high levels of fecal coliform and/or streptococcus bacteria, and/or hazardous substances adjacent to (upstream or downstream) State approved shellfishing waters and public or private bathing beaches; or

iv. Areas within 1,000 meters or less of oyster beds as defined in N.J.A.C. 7:7-9.2.

The proposed dredging site is located within identified federally-endangered sturgeon habitat and is therefore subject to seasonal timing restrictions. In-water work will not be conducted between March 1 and July 15 in order to be protective of these species. Additional information on the impacts of the proposed activities on

sturgeon populations is provided in Appendix E. Therefore, this condition will be met.

9.2.3 New dredging (N.J.A.C. 7:7-12.7)

(a) New dredging is the removal of sediment that does not meet the definition of maintenance dredging at N.J.A.C. 7:7-12.6 or the definition of environmental dredging at N.J.A.C. 7:7-12.8. The temporary or permanent displacement or removal of sediment for the purpose of installing submerged pipelines and cables is considered new dredging.

(c) New dredging is conditionally acceptable in all general water areas for boat moorings, navigation channels, anchorages, or submerged cable or pipelines provided:

1. *There is a demonstrated need that cannot be satisfied by existing facilities;*

   As discussed in the Alternatives Analysis (Appendix D), the present number of terminal and port facilities located along the Delaware River is insufficient to meet growing market demand. A new port facility with multiple deep water berths would address the need for additional berths in southern New Jersey. While a portion of the dredging required can be accomplished through maintenance dredging, a majority of new dredging is required to ensure that a sufficient berth area is created and so that the Marine Terminal is accessible to vessel traffic within the Delaware River. Therefore, this conditions is met.

2. *The facilities served by the new dredging satisfy the location requirements for special water's edge areas;*

   Compliance with coastal rules on Special Areas is discussed at Section 9.1; therefore, this condition is met.

3. *The adjacent water areas are currently used for recreational boating, commercial fishing or marine commerce;*

   The Delaware River is used for marine commerce; therefore, this condition is met.

4. *The dredge area causes no significant disturbance to special water or water's edge areas;*

   See Section 9.1. This condition will be met.

5. *The adverse environmental impacts are minimized to the maximum extent feasible;*

   BMPs will be implemented to minimize sediment resuspension and limit the potential impacts to water quality and aquatic biota (see Appendix E). In addition, a fish window of March 1 to July 15 will be observed to be protective of migratory and spawning fish populations. Additional

mitigation measures to avoid and minimize potential impacts to federally endangered sturgeon are discussed in Appendix E. Environmental impacts arising as a result of new dredging will be minimized to the maximum extent practicable; therefore, this condition will be met.

6. *The dredge area is reduced to the minimum practical;*

   The proposed dredging area utilizes the existing barge berth at the Project Site, thereby greatly reducing the area of new dredging required. The area of dredging proposed is the minimum feasible to provide access to the new Marine Terminal; therefore, this condition is met.

7. *The maximum depth of the newly dredged area shall not exceed that of the connecting access or navigation channel necessary for vessel passage to the bay or ocean;*

   Based on available bathymetry data, the portion of the Delaware River main navigation channel adjacent to the project area is approximately 55 feet deep. The proposed dredge depth is -40 feet MLLW; therefore, this condition is met.

8. *The new dredging will have no adverse impacts on groundwater resources;*

   New dredging will not adversely impact groundwater resources; therefore, this condition is met.

9. *No dredging shall occur within 10 feet of any wetlands. The proposed slope from this 10 foot buffer to the nearest edge of the dredged area shall not exceed three vertical to one horizontal; and*

   The limits of proposed new dredging are not located within 10 feet of any wetlands; therefore, this condition does not apply.

10. *The new dredging shall be accomplished consistent with the conditions listed at N.J.A.C. 7:7-12.7(c).10.i-viii.*

    Compliance with the above-referenced conditions is discussed at Section 9.2.2 for maintenance dredging and does not change for new dredging activities. Refer to Section 9.2.2.

9.2.4 Dredged material disposal (N.J.A.C. 7:7-12.9)

Dredged material disposal is the discharge of sediments removed during dredging operations in water areas. Dredged material disposal does not include the beneficial use of dredged material for the purposes of habitat creation, restoration, or enhancement, artificial reef construction, or the establishment of living shorelines.

Dredged materials generated by the proposed activities will not be disposed in a water area; therefore, this rule does not apply. Dredge materials management options are discussed in Appendix F.

9.2.5 Filling (N.J.A.C. 7:7-12.11)

(a) Filling is the deposition of material including, but not limited to, sand, soil, earth, and dredged material, into water areas for the purpose of raising water bottom elevations to create land areas.

(e)...In cases where there is no alternative to filling, filling is conditionally acceptable provided:

1. The use that requires the fill is water dependent;

2. There is a demonstrated need that cannot be satisfied by existing facilities;

3. There is no feasible or practicable alternative site on an existing water's edge;

4. The minimum practicable area is filled;

5. The adverse environmental impacts are minimized, for example, by compensating for the loss of aquatic habitat by creation of an area of equivalent or greater environmental value elsewhere in the same estuary;

6. Minimal feasible interference is caused to special areas, as defined at N.J.A.C. 7:7-9; and

7. Pilings and columnar support or floating structures are unsuitable for engineering or environmental reasons.

(g) Filling of wetlands must comply with the wetlands rule, N.J.A.C. 7:7-9.27.

As discussed in the Alternatives Analysis (Appendix D), there is increasing demand for additional port capacity that cannot be met by existing terminal facilities along the Delaware River. The proposed port will meet the demonstrated need for additional terminal facilities in the south New Jersey region. The Project Site requires filling of freshwater wetland and coastal wetland areas in order to raise site grades for Port-related structures and terminal storage areas. As discussed in the Alternatives Analysis, there is no feasible alternative location for the proposed activities (Appendix D). The fill required will be the minimum necessary to meet flood hazard area design requirements. Compliance with the Freshwater Wetlands Act for filling within freshwater wetlands is discussed in Section 7. A mitigation proposal that presents concepts to compensate for impacts to coastal and freshwater wetlands is provided in Appendix H.

Because the proposed fill is required to fulfill the basic project purpose for the intended water-dependent use and will comply with FWPA rules, the proposed activities meet the requirements for conditionally acceptable fill at N.J.A.C. 7:7-12.11(e) above. Therefore, this condition is met.

9.2.6 Outfalls and intakes (N.J.A.C. 7:7-12.18)

(a) Outfalls and intakes are pipe openings that are located in water areas for the purpose of intake of water or discharge of effluent including sewage, stormwater and industrial effluents. Outfalls and intakes are conditionally acceptable provided that the use associated with the intake or outfall meets applicable rules of this chapter.

A number of outfall and intake structure are proposed to manage stormwater on the Project Site. The location and design of the proposed outfall and intake structures is shown on the Project Drawings. As an intermodal port facility, operations involve the transfer of goods and do not include manufacturing activities; therefore, discharge of industrial effluents is not proposed. Sewage will be treated through the local publically owned treatment works and will not be discharged to regulated on-site wetlands or waters. The applicant will obtain applicable NJPDES permits for sewage and stormwater outfalls. The use of outfall and intakes structures will comply with applicable rules of this chapter; therefore, this condition is met.

9.3 Requirements for non-porous cover and vegetative cover for general land areas and certain special areas (7:7-13)

(a) This subchapter sets forth requirements applicable in general land areas and certain special areas for impervious cover and vegetative cover on sites in the upland waterfront development area and in the CAFRA area.

b) General land areas are all land areas that are subject to this chapter and that are located outside of special water's edge areas. Special water's edge areas are identified at N.J.A.C. 7:7- 9.16 through 9.30.

9.3.1 Determining if a site if forested or unforested (N.J.A.C. 7:7-13.5)

The project site consists of a mix of developed and undeveloped areas. Developed areas are concentrated in the northern area of the Marine Terminal and include former industrial and manufacturing areas. Aerial maps compiled within the last five years were utilized to determine existing land coverage. In general, grass and dirt areas make up the majority of cover in addition to the former buildings, roadways, and driveways. Therefore, the development area within the waterfront development area was determined to be un-forested.

9.3.2 Upland waterfront development area regions and growth ratings (N.J.A.C. 7:7-13.6)

The growth rating for a site in the upland waterfront development area is determined by the region in which it is located, and the growth rating assigned to that region.

The project is located in the Delaware River region, which is assigned a "Development Growth" rating.

9.3.3 Environmental sensitivity of a site in the upland waterfront development area (N.J.A.C. 7:7-13.7)

The environmental sensitivity of a site in the upland waterfront development area is based on the soil type and the depth to seasonal high water table or the presence of paving or structures. Different portions of a site may have different environmental sensitivities.

(b) A site or portion of a site has a high environmental sensitivity if it has wet or high permeability moist soils.

(c) A site or portion of a site has a medium environmental sensitivity if it has neither a high environmental sensitivity nor a low environmental sensitivity.

(d) A site or portion of a site has a low environmental sensitivity if the depth to seasonal high water table is greater than five feet, or the site or portion of the site has paving or structures at the time the application is submitted.

A large portion of the Project site is located in the former manufacturing area of the DuPont Repauno Works facility and contains former roads and concrete building footprints from historic operations. Therefore, the project site has a low environmental sensitivity rating.

9.3.4 Development potential of a site in the upland waterfront development area (N.J.A.C. 7:7-13.7)

Development potential is determined by the type of development proposed and the presence or absence of certain development-oriented elements at or near the site of the proposed development, including roads; wastewater conveyance, treatment and disposal system; and existing development. Development potential may be high, medium or low, as determined under N.J.A.C. 7:7-13.9 through 13.11. A single development potential applies to an entire site.

(b) A site upon which a major commercial or industrial development is proposed is a high development potential site if it meets all of the requirements at (b)1 through 4 below:

1. An existing paved public road abuts the site;

2. If an offsite wastewater conveyance, treatment and disposal system is to be used:

i. The existing conveyance component of the system abuts the site; and

ii. The existing wastewater conveyance, treatment and disposal system has adequate capacity to convey, treat, and dispose of the sewage from the proposed development, or the applicant has an agreement with the sewage authority to modify the system to provide adequate capacity;

3. A part of the perimeter of the site is adjacent to, or immediately across a paved road from, existing major commercial or industrial development, or, in a region with a development growth rating, the site is adjacent to or immediately across a paved road from any existing commercial development

The proposed DRP Gibbstown Logistics Center site is located adjacent to an existing paved public road and is part of an existing Gloucester County Wastewater Management Plan which is associated with an existing off-site publically owned treatment works operated by the Township of Greenwich. The offsite Township treatment works has the capacity to convey, treat, and dispose of sewage waste generated at the Project Site; therefore, the site has a High Development Potential.

9.3.5 Development intensity of a site in the upland waterfront development area (N.J.A.C. 7:7-13.12)

The development intensity for a site in the upland waterfront development area is based on growth rating, environmental sensitivity, and development potential.

As described above, the Site is located in a Development Growth region and has a Low Environmental Sensitivity and a High Development Potential. Therefore, based on Table A in the Coastal Management Zone Rules (N.J.A.C. 7:7), the Project Site has a High Development Intensity.

9.3.6 Impervious and Vegetative cover limits for a site in the upland waterfront development area (N.J.A.C. 7:7-13.13 & N.J.A.C. 7:7-13.14)

The project involves redevelopment of approximately 13% (220 acres) of a 1630 acre site, so on the vast majority of the property, the cover will remain vegetative and pervious.

9.4 Compliance with Coastal Zone Management Rules on Location (N.J.A.C. 7:7-14)

9.4.1 Basic Location Rule (N.J.A.C. 7:7-14.2)

(a) A location may be acceptable for development under N.J.A.C. 7:7-9, 12, 13, and 14, but the Department may reject or conditionally approve the proposed development of the location as reasonably necessary to:

6. *Promote the public health, safety, and welfare;*
7. *Protect public and private property, wildlife and marine fisheries; and*
8. *Preserve, protect and enhance the natural environment.*

As demonstrated in the Alternatives Analysis, the proposed development is in response to a demonstrated need for expanded port capacity along the Delaware River. The proposed work has been designed to minimize adverse impacts to the environment to the maximum extent practicable (see Appendix D). Redevelopment of the site will also promote the public welfare by revitalizing a facility that was once an economic driver of the community.

The Project Site was a former munitions and chemicals manufacturing facility; contamination associated with this historic use has been documented on the Site. Redevelopment of the site into an intermodal port facility is linked to remediation of the site currently being performed by the site owner under the supervision of the NJDEP. Remediation required for redevelopment is in the public interest and will promote public health, safety, and welfare by eliminating site hazards.

The development additionally requires the removal of approximately 457,000 cubic yards of dredged materials from the Delaware River. As discussed in Appendix F, the sediments proposed to be dredged contain contaminants including PCBs, PAHs and arsenic. Removal of these sediments through dredging will reduce the potential for contaminants to be exposed to the aquatic environment.

Unavoidable impacts to wetlands and wetlands buffers will be mitigated as described in Appendix H.

9.4.2 Secondary impacts (N.J.A.C. 7:7-14.3)

(a) Secondary impacts are the effects of additional development likely to be constructed as a result of the approval of a particular proposal. Secondary impacts can also include traffic

increases, increased recreational demand and any other offsite impacts generated by onsite activities which affect the site and surrounding region.

As demonstrated in the Alternatives Analysis, the proposed project is in response to a demonstrated need for expanded port capacity (see Appendix D). Construction of the Marine Terminal will result in an increase in vessel traffic transporting goods to and from the multi-purpose berth; however, increase in ship traffic is not expected to have an adverse impact on navigation within the Delaware River.

Other secondary impacts at the Project Site include increases in truck traffic as well as an increase in noise associated with facility construction and operations. The proposed transportation improvements, including intersection enhancements and road-widening, have been designed to prevent traffic congestion and reduce adverse impacts associated with increase traffic volumes on the site. Access to the proposed development has been designed to provide efficient entry and exit from the Project Site; therefore, increased traffic volumes are not anticipated to cause a significant burden to off-site roadways. The applicant also understands that local government is developing plans to construct an alternative access road that would bypass residential areas of downtown Gibbstown.

With respect to increase noise, the site was previously operated as an industrial manufacturing facility, including the production and testing of explosives.[17] Because port operations will be located within a former industrial areas and are separated from nearby residential areas by undeveloped lands, any increase in noise associated with facility operations is not anticipated to adversely impact off-site areas.

9.5 Compliance with Coastal Zone Management Use Rules (N.J.A.C. 7:7-15)

9.5.1 Industry (N.J.A.C. 7:7-15.7)

(a) Industry uses are uses that involve industrial processing, manufacturing, storage, or distribution activities. These uses include, but are not limited to, electric power production, food and food by-product processing, paper production, agrichemical production, chemical processes, storage facilities, metallurgical processes, mining and excavation processes, and processes using mineral products. Industrial uses do not include petroleum refining which is considered and energy use and, therefore, subject to the standards of N.J.A.C. 7:7-15.4.

(b) Industrial uses are encouraged in special urban areas. Elsewhere, industrial uses are conditionally acceptable provided they comply with all applicable location and resource rules.

The proposed development is an intermodal Marine Terminal. The facility will handle a variety of goods and materials including storage of automobile, break-bulk, and refrigerated and dry storage cargo. The facility will also have capacity to store bulk liquids products. As an intermodal port facility, operations involve the transfer of goods and do not include manufacturing activities. The project complies with

[17] The DuPont Repauno Works site began manufacturing and testing explosives in the late 1890s and continued until the 1950s. Explosives manufacturing was discontinued in the 1950s. Source: 1996 Phase III Remedial Investigation Report, Vol 1. DuPont.

applicable location and resource rules as discussed at Section 9.4 and 9.5; therefore, this condition is met.

9.5.2 Port (N.J.A.C. 7:7-15.9)

(a) Port uses are concentrations of shoreside marine terminals and transfer facilities for the movement of waterborne cargo (including fluids), and including facilities for loading, unloading and temporary storage.

(b) Port-related development and marine commerce is encouraged in and adjacent to established port areas. Water-dependent development shall not be preempted by non-water dependent development in these areas.

(c) New port uses outside of existing ports as defined at N.J.A.C. 7:7-9.11(a) are acceptable only when there is a clear demonstration of need, and when suitable land and water area is not available in or adjacent to an existing port.

(d) New or expanded ports must be compatible with surrounding land uses and provide for maximum open space and physical and visual access to the waterfront, provided that this access does not interfere with port operations or endanger public health and safety. New or expanded ports must also not interfere with national, State, county or municipal parks, recreational areas, or wildlife refuges.

(e) New, expanded or redeveloped port facilities must have direct access to navigation channels of sufficient depth for anticipated vessel access, with minimal dredge and fill requirements, adequate access to road, rail transportation, and adjacent land with sufficient load bearing capacity for structures.

As demonstrated in the alternatives analysis, the proposed Marine Terminal is in response to a demonstrated need for expanded port capacity along the Delaware River (see Appendix D). Suitable land and water areas are not available at alternative locations or existing port facilities (see Appendix D). The proposed Marine Terminal is a water-dependent activity and is compatible with surrounding land uses as discussed at Section 9.6.8. Because the Marine Terminal will operate as a commercial cargo facility, visual and physical access to the waterfront must be restricted to protect public health and safety (see Section 9.6.5).

Dredging is proposed to provide direct access to the Delaware River navigation channel. In addition, improvements to rail and roadways are proposed in order to facilitate effective transportation around the facility. The proposed development complies with the requirements for new port facilities as described above; therefore, this condition is met.

9.5.3 Dredged material placement on land (N.J.A.C. 7:7-15.12)

(a) Dredged material placement is the disposal or beneficial use of sediments removed during dredging operations. Beneficial uses of dredged material include, but are not limited to, fill, capping material, topsoil, bricks, and lightweight aggregate. This rule applies to the placement of dredged material landward of the spring high water line. The standards for dredged material disposal in water areas are found at N.J.A.C. 7:7-12.9.

(b) Dredged material placement on land is conditionally acceptable provided that the use is protective of human health, groundwater quality, and surface water quality, and manages

ecological risks. Testing of the dredged material may be required as needed to determine the acceptability of the placement of the material on a particular site in accordance with Appendix G.

(c) Dredged material disposal and/or construction of a confined disposal facility is prohibited in wetlands unless the criteria found at N.J.A.C. 7:7-9.27 are met.

(d) The beneficial use of dredged material of appropriate quality and particle size for purposes such as restoring landscape, enhancing farming areas, capping and remediating landfills and brownfields, transportation projects, beach protection, creating marshes, capping contaminated dredged material disposal areas, and making new wildlife habitats is encouraged.

(e) Adverse effects associated with the transfer of the dredged materials from the dredging site to the upland confined disposal facility or upland placement site shall be minimized to the maximum extent feasible.

(f) Dredged material placement in wet and dry borrow pits is conditionally acceptable (see N.J.A.C. 7:7-9.14 and 9.33).

(g) If pre-dredging sediment analysis indicates contamination, then special precautions shall be imposed including but not necessarily limited to increasing retention time of water in the disposal site or rehandling basin through weir and dike design modifications, use of coagulants, ground water monitoring, or measures to prevent biological uptake by colonizing plants.

(h) All potential releases of water from confined (diked) disposal facilities and rehandling basins shall meet existing State Surface Water Quality Standards (N.J.A.C. 7:9B) and State Ground Water Quality Standards (N.J.A.C. 7:9).

As summarized in Section 4.6, sediments proposed to be dredged were characterized in accordance with a SSAP approved by ODST. Options for the management of dredged material have been identified based on an engineering and environmental characterization of sediment cores and samples that were collected in the dredging area. Refer to Appendix F for a detailed discussion of the data and management options. Options being considered include the placement of dredged materials on land, off-site disposal and off-site management at an approved dewatering facility. The selected option will comply with the rules stated at N.J.A.C. 7:7-15.12 above; therefore, this condition is met.

9.6 Compliance with Coastal Zone Management Resource Rules (N.J.A.C. 7:7-16)

In addition to satisfying the location and use rules, a proposed development must satisfy the requirements of this subchapter. This subchapter contains the standards the Department utilizes to analyze the proposed development in terms of its effects on various resources of the built and natural environment of the coastal zone, both at the proposed site as well as in its surrounding region.

9.6.1 Marine Fish and Fisheries (N.J.A.C. 7:7-16.2)

(b) Any activity that would adversely impact on the natural functioning of marine fish, including the reproductive, spawning and migratory patterns or species abundance or diversity of marine fish, is discouraged. In addition, any activity that would adversely impact any New Jersey based marine fisheries or access thereto is discouraged, unless it complies with (c) below.

Shortnose sturgeon (federally endangered) habitat has been identified in project areas within the Delaware River. In addition, the project is located in the vicinity of documented Atlantic sturgeon (federally endangered) spawning areas. Dredging and other in-water activities related to the demolition and construction of wharf facilities may impact sturgeon habitat within the project area (see Appendix E). Therefore, no in-water work will be performed between March 1 and July 15 to avoid potential impacts to migrating sturgeon. Refer to Appendix E for additional detail.

As discussed at Section 9.1.1, the Project Site does not contain any designated EFH. No critical habitat has been designated under the ESA for shortnose or Atlantic sturgeon species. Other anadromous fishes that may migrate up the Delaware River past the Project Site include American shad (*American shad (Alosa sapidissima),* alewife *(Alosa pseudoharengus),* blueback herring *(Alosa aestivalis),* striped bass *(Morone saxatilis),* hickory shad *(Alosa mediocris),* gizzard shad *(Dorosoma cepedianum*), and white perch *(Morone americana).* American eel (*Anguilla rostrata),* is also commonly found in the Lower Delaware River. NJDEP and the US Army Corps of Engineers restricts activities in waterfront activities where these species may be present between March 1 and July 15.

A minor, temporary decrease in water quality may occur during in-water demolition and dredging activities due to a potential increase in suspended solids caused by disturbance of sediments. A list of BMPs to manage sediment resuspension and turbidity as a result of dredging is presented in Appendix E. In addition, A Soil Erosion and Sediment Control Plan for upland and in-water work will be prepared and submitted to the Gloucester County Soil Conservation Board for approval prior to beginning work to reduce adverse impacts to water quality.

Based on the implementation of BMPs and timing restrictions, the proposed activities are not expected to adversely impact anadromous fish species that may potentially migrate through the project area. Therefore, this condition is met.

9.6.2 Water Quality (N.J.A.C. 7:7-16.3)

(a) As required by Section 307(f) of the Federal Coastal Zone Management Act, 16 U.S.C. §§ 1451 et seq., Federal, State, and local water quality requirements established under the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq., shall be the water resource standards of the coastal management program. These requirements include not only the minimum requirements imposed under the Clean Water Act but also the additional requirements adopted by states, localities, and interstate agencies pursuant to Section 510 of the Clean Water Act and such statutes as the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. In the Delaware River Basin, the requirements include the prevailing "Basin

Regulations-Water Quality" adopted by the Delaware River Basin Commission as part of its Comprehensive Plan. Department rules related to water pollution control and applicable throughout the entire coastal zone include, for example, the Surface Water Quality Standards (N.J.A.C. 7:9B), the Ground Water Quality Standards (N.J.A.C. 7:9C), and the New Jersey Pollutant Discharge Elimination System rules (N.J.A.C. 7:14A).

During construction, a SESC Plan, approved by the Gloucester County Soil Conservation District will be implemented. In conjunction with this plan, the applicant will obtain a New Jersey Pollutant Discharge Elimination System (NJPDES) Stormwater Permit for construction activities. Monitoring and reporting of stormwater quality will be implemented as may be required by that permit. A NPDES stormwater permit will be obtained for the operating facility as well, and monitoring and reporting of stormwater quality will be implemented as may be required by that permit. Therefore, the project and will be constructed and operated in accordance with valid NJPDES permits, such that the project will not cause or contribute to a violation of any applicable State water quality standard.

9.6.3 Stormwater management (N.J.A.C. 7:7-16.6)

If a project or activity meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project or activity shall comply with the Stormwater Management rules at N.J.A.C. 7:8.

The proposed activities disturb greater than one acre of land and therefore meet the definition of a major development" at N.J.A.C. 7:8-1.2. A Stormwater Management Report has been prepared to address stormwater at the proposed development (See Appendix G). Compliance with N.J.A.C. 7:8 is summarized in the project Stormwater Report (Appendix G).

9.6.4 Vegetation (N.J.A.C. 7:7-16.7)

(a) Vegetation is the plant life or total plant cover that is found on a specific area, whether indigenous or introduced by humans.

(b) Coastal development shall preserve, to the maximum extent practicable, existing vegetation within a development site. Coastal development shall plant new vegetation, particularly appropriate coastal species, native to New Jersey to the maximum extent practicable.

Development of the Marine Terminal will require clearing of vegetation to construct landside facilities. Much of the site is developed, with industrial and developed areas concentrated in the northern part of the site (see Appendix E). Approximately fifty percent of the Project Site is vegetated, with phragmites and other disturbed vegetation communities present throughout the site. Wetlands and wetlands buffers occur on approximately forty percent of the Project Site. Vegetation communities are further described in Section 4.3.

The project footprint has been refined and reduced to avoid impacts to vegetated areas to the maximum extent practicable. Modifications to the design include relocating the warehousing and logistics center south of the proposed Marine Terminal

in order to preserve the Central Forest area, a large (44-acre) forested wetlands complex, which will remain undisturbed.

As discussed previously in this compliance statement, the proposed activities involve permanent impacts to vegetation within Special Areas including Wetlands, Wetlands Buffers, Threatened and Endangered Species Habitat, and Intertidal/Subtidal Shallows. Mitigation for permanent loss of vegetation within these areas will be performed in accordance with applicable CZM Rules. Where appropriate, vegetated areas temporarily impacted by construction will be restored to using a mix of native, coastal species.

The proposed project has been designed to preserve existing vegetation to the maximum extent practicable and will perform mitigation and restoration, where required. Therefore, this condition is met.

9.6.5 Air Quality (N.J.A.C. 7:7-16.8)

(a) The protection of air resources refers to the protection from air contaminants that injure human health, welfare or property, and the attainment and maintenance of State and Federal air quality goals and the prevention of degradation of current levels of air quality.

(b) Coastal development shall conform to all applicable State and Federal regulations, standards and guidelines and be consistent with the strategies of New Jersey's State Implementation Plan (SIP). See N.J.A.C. 7:27 and New Jersey SIP for ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, lead, and visibility.

(c) Coastal development shall be located and designed to take full advantage of existing or planned mass transportation infrastructures and shall be managed to promote mass transportational services, in accordance with the traffic rule, N.J.A.C. 7:7-16.12.

Certain activities within the proposed Marine Terminal may require Federal and or State air quality permits for operation. DRP will obtain the required permits for the operating facility, and monitoring and reporting of air quality will be implemented as may be required by the respective permit(s). The project will operated in accordance with valid Federal and State permits, such that the project will not cause or contribute to a violation of applicable State or Federal air quality standards. Accordingly, this requirement is met.

9.6.6 Public Access (N.J.A.C. 7:7-16.9)

(a) Public access to the waterfront is the ability of the public to pass physically and visually to, from, and along tidal waterways and their shores and to use such shores, waterfronts and waters for activities such as navigation, fishing, and recreational activities including, but not limited to, swimming, sunbathing, surfing, sport diving, bird watching, walking, and boating. Public accessways and public access areas include streets, paths, trails, walkways, easements, paper streets, dune walkovers/walkways, piers and other rights-of way. No authorization or approval under this chapter shall be deemed to relinquish public rights of access to and use of lands and waters subject to public trust rights in accordance with N.J.A.C.7:7-9.48. Further, no authorization or approval under this chapter shall be

considered a Tidelands approval or shall exempt an applicant from the obligation to obtain a Tidelands approval, if needed.

(b) In addition to the broad coastal goals outlined at N.J.A.C. 7:7-1.1(c), public access shall be provided in a manner designed to achieve the following public access goals:

2. All existing public access to, and along tidal waterways and their shores shall be maintained to the maximum extent practicable;

3. New development shall provide opportunity for public access to tidal waterways and their shores on or offsite;

4. Public access to tidal waterways and their shores shall be provided in such a way that it shall not create conditions that may be reasonably expected to endanger public health or safety, or damage the environment. To that end, public access may be restricted seasonally, hourly, or in scope (for example, access restricted to a portion of the property, or access allowed for fishing but not swimming due to consistent strong currents); and

5. Public access to tidal waterways and their shores shall be provided in such a way that it shall not create a significant homeland security vulnerability... Therefore, public access may be prohibited in locations where homeland security concerns are present or where it is not practicable based on the risk of injury from hazardous operations or substantial permanent obstructions, and no measures can be taken to avert these risks.

The proposed upland construction activities are located at the former DuPont Repauno Works site, which was operated as an industrial munitions and chemicals manufacturing facility for over 100 years. The site is privately owned and public access to the property has always been restricted due to health, safety and security concerns. No existing public accessways are present on the Project Site. Because the site will be developed as a port facility, allowing public access could create a homeland security concern or could put the public at risk due to facility operations. For these safety and security concerns, it is not practical to create new public access routes on the Project Site; however public access will be provided at a location on the applicant's Property at a distance away from the active Marine Terminal; therefore, this condition will be met.

9.6.7 Scenic Resources and Design (N.J.A.C. 7:7-16.10)

Scenic resources include the views of the natural and/or built landscape. Large-scale elements of building and site design are defined as the elements that compose the developed landscape such as size, geometry, massing, height and bulk structures. New coastal development that is visually compatible with its surroundings in terms of building and site design, and enhances scenic resources is encouraged. New coastal development that is not visually compatible with existing scenic resources in terms of large-scale elements of building and site design is discouraged.

The proposed activities are located within the Delaware River Region at a former industrial manufacturing site and will be visually compatible with surrounding industrial facilities located along the Delaware River. As stated at N.J.A.C. 7:7-

16.10(d), areas within the Delaware River Region are exempt from scenic resources and design requirements; therefore, this condition does not apply.

9.6.8 Buffers and compatibility of uses (N.J.A.C. 7:7-16.11)

Buffers are natural or man-made areas, structures, or objects that serve to separate distinct uses or areas. Compatibility of uses is the ability for uses to exist together without aesthetic or functional conflicts. Development shall be compatible with adjacent land uses to the maximum extent practicable.

1. Development that is likely to adversely affect adjacent areas, particularly special areas, N.J.A.C. 7:7-9, or residential or recreation uses, is prohibited unless the impact is mitigated by an adequate buffer. The purpose, width, and type of the required buffer shall vary depending upon the type and degree of impact and the type of adjacent area to be affected by the development, and shall be determined on a case-by-case basis.

As discussed in Section 3, the Project Site is located on a property previously used as an industrial manufacturing facility. It is bordered by the Delaware River to the north, undeveloped land to the east and west, and an industrial facility to the south (see Figure 1). Development on the Project Site is buffered from surrounding undeveloped area by C-Line Road (an extension of Repauno Avenue) to the east and A-Line Road to the west (see Figure 2). A berm which runs along the northern Property boundary separates the project area from the Delaware River. The berm and project roads serve as man-made buffers between development activities occurring on the Project Site and adjacent undeveloped land. The undeveloped land to the east and west of the project site provide an additional vegetated buffer to isolate noise and other construction disturbance from nearby residential or commercial areas.

In certain areas, project activities may impact wetlands buffers of freshwater or coastal wetlands which occur on the Property adjacent to the proposed development. Impacts to wetland buffers are regulated under the Freshwater Wetlands Protection Act Rules and Coastal Zone Management Act Rules. A separate FWPA Individual Permit is being prepared to address impacts to freshwater wetlands and wetlands buffers. Compliance with FWPA Rules is discussed in Section 7. See Section 9.1.10 for compliance with CZM Rules on Wetland Buffers.

10. SUMMARY AND CONCLUSIONS

This compliance statement has demonstrated compliance with applicable requirements of the Coastal Zone Management Rules (N.J.A.C. 7:7), Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A); and Flood Hazard Area Control Act Rules (N.J.A.C. 7:13).

Based on the findings of this review, the project is in compliance with the applicable requirements of these rules. In some cases mitigation is required to demonstrate compliance. Mitigation has been proposed for impacts to freshwater wetlands, coastal wetlands, wetland transition areas, and intertidal/subtidal shallows. Details concerning the applicant's proposed mitigation options are discussed at Appendix H.

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