

February 14, 2017

Suzanne Dietrick Case Manager, Land Use Management New Jersey Department of Environmental Protection Trenton, New Jersey

Re: Comment Gibbstown Logistics Center (Repauno Site) Greenwich Township, Gloucester County, NJ; Revised Multi-Permit Application to DLUR on Delaware River Partners, LLC permit applications under NJAC 7:8 Stormwater Management Rules and NJAC Flood Hazard Area Control Act.

Dear Ms. Dietrick.

Delaware Riverkeeper Network submits this comment letter and attached expert report by Princeton Hydro regarding the Flood Hazard Area and Stormwater Management permit applications regarding the Delaware River Partners proposed Gibbstown Logistics Center.

Delaware Riverkeeper Network requests a public hearing on the proposed project under wetlands regulations, NJAC 7:7A-12.4. The nature, size, and scope of the proposed activities at this site will have substantial impact on wetlands on the site, the species that rely on these resources, and is of great interest to the public. Valuable information can be obtained from the public at a public hearing on this project, improving the understanding of its potential impacts.

The proposed project is simply too expansive and too heavy in scope for the Repauno site. Much of this site has reverted to natural conditions and is no longer the industrial landscape it was when in use by Dupont. The applicant is essentially shoehorning a huge development onto a site unsuited for this type and scope of development and use. The site contains large expanses of natural systems that are regulated areas, such as wetlands and riparian areas and is rich in flora and fauna habitat. Yet the proposed use of the site, the amount of development proposed, the infrastructure required and activities that will occur during construction and during the life of the project do not provide protection or minimization of impacts. Instead, the applicant tries to squeeze his intended use on to the site, regardless of the negative impacts to the resources and natural assets that are there. Further, the applicant does not attempt to provide mitigation for the losses that will occur.

DELAWARE RIVERKEEPER NETWORK

Throughout the applications, the applicant shows disregard for regulatory controls, an attempt to avoid regulation, does not show that resources are protected to the maximum extent practicable, and does not provide adequate justification for disturbance and degradation that would occur. There are numerous examples in the application package that demonstrate this. The applicant shows disregard for the wetlands on the site with the proposal to place stormwater infrastructure in the wetlands and the transition areas of wetlands. The applicant attempts to circumvent regulations by misinterpreting the exemption of "water dependent" projects, allowing intrusions into riparian and other natural areas that are not water dependent. The applicant claims an unlawful exemption from regulation by the refusal to recognize impervious liners of wet ponds as impervious. The applicant proposes to place dredged fill from the river channel into a "process ditch" without following channel modification requirements or assessing the full impacts. These are just some examples of why these applications are deficient. The attached expert report from Princeton Hydro provides a complete assessment of these and many more reasons these permits must not be issued.

The applicant has unlawfully segmented this project, ignoring the requirement that all aspects of the applicant's development project must be considered under the federal definition of a "Single and Complete Project", as per 33 CFR 330.2(i). Some portions of the site are under approval or request for approval by the municipality but are not part of these applications. Caverns on the site are planned to be used for hazardous liquid storage; how the project development will effect ongoing clean-up activities of contaminated groundwater at the site is not examined; warehouses are planned on portions of the site that are not part of this application package; there may be pipeline facilities developed at the site. The applicant must present all development on this entire site applying the definition of a Single and Complete Project but has not done so.

Delaware Riverkeeper Network will be filing additional comments and expert reports by February 17, the deadline for comments on these applications.

Thank you for the opportunity to comment.

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Sincerely,

Maya van Rossum

the Delaware Riverkeeper

Tracy Carluccio

Deputy Director

Attached: Princeton Hydro DRP Gibbstown Logistics Center, Delaware River Partners LLC, Stormwater and Flood Hazard Area Review, Greenwich Township, Gloucester County, New Jersey, dated 2.13.17

Princeton Hydro



February 13, 2017

Delaware Riverkeeper Network
Attn: Tracy Carluccio
Deputy Director
925 Canal Street 7th Floor
Suite 3701
Bristol, PA 19007

Scientists, Engineers & Environmental Planners Designing Innovative Solutions for Water, Wetland and Soil Resource Management

Re: DRP Gibbstown Logistics Center Delaware River Partners LLC

Stormwater and Flood Hazard Area Review

Greenwich Township, Gloucester County, New Jersey

pH No. 1020.022

Dear Tracy,

We have reviewed the plans and supporting calculations for consistency with the requirements of the N.J.A.C. 7:8 Stormwater Management Rules and N.J.A.C. 7:13 Flood Hazard Area Control Act.

Our review has indicates that the project does not meet numerous requirements of both the Flood Hazard Area and Stormwater Management Rules. More specifically, the project's proposed stormwater management does not meet the State water quality requirements. As you are aware, the project site is essentially surrounded by sensitive freshwater and coastal wetland habitat. Therefore, it is imperative that the proposed stormwater management system fully comply with the requirements set forth by the New Jersey Department of Environmental Protection (NJDEP).

Documents Reviewed

The following documents were provided to us for the purpose of our review:

- DRP Gibbstown Logistics Center Permit Plan Set prepared by Moffatt and Nichol dated July 2016, revised December 9, 2016.
- Stormwater Management Report for DRP Gibbstown Logistics Center, Township of Greenwich, Gloucester Country, New Jersey prepared by Langan Engineering and Environmental Services, Inc. dated July 2016, revised December 2016.
- Operations and Maintenance Manual Stormwater Management Facilities for DRP Gibbstown Logistics Center, Township of Greenwich, Gloucester Country, New Jersey prepared by Langan Engineering and Environmental Services, Inc. dated July 2016, revised December 2016, dated December 2016
- Copy of the December 9, 2016 DLUR application in response to the NJDEP Notice of Administrative and Technical Deficiencies prepared by Ramboll Environ.

The following section provides more detailed comments on this application

Introduction

Since the last submission, one of the proposed wet pond systems has been eliminated. In total there are three (3) wet ponds, two (2) underground detention vaults and four (4) certified Manufactured Treatment Devices (MTD) to meet Total Suspended Solids (TSS) removal rates.

The applicant has claimed that peak flow control requirements are not applicable for a large portion of the project in accordance with NJAC 7:8-5.4(a)3.iv due to the project site being located in a tidal flood hazard area.

We offer the following comments related to the proposed stormwater features. For consistency we have included our original comment, the applicant's response (in italics) and our response in bold font.

Low Impact Development

1. One of the key elements of Low Impact Development is the preservation of natural features especially those that are important to the maintenance of water quality. In this case all four (4) proposed wet ponds are located in wetlands or wetland transition areas and in some cases both. Relative to wet ponds 3A and 4 entire sections of transition area are proposed to be eliminated so that the toe of the basin berm borders the existing wetland. The need to place stormwater facilities in regulated areas represents a failure to realistically understand the requirements of wetland avoidance and minimization as set forth in the 404(b)1 Guidelines. The need to encroach into regulated features such as wetlands and wetland transition areas provides a clear indication that the site is too small for the proposed use.

Through an iterative feasibility and design process, Delaware River Partners (DRP) has conceived a redevelopment plan that meets the project's needs, while avoiding or minimizing environmental impacts to the maximum extent practicable. Specifically, DRP has further reduced potential wetland impacts by nearly ten acres, to a total of 4.789 acres. The design process and potential impacts to wetlands are further described in the application documents, including the revised Alternatives Analysis and Compliance Statement. Low impact development techniques that disconnect impervious coverage and extend time of concentration pathways have been incorporated in the Marine Terminal South area. Specifically, flush curb has been provided to promote vegetative conveyance in lieu of traditional curbed inlets.

Since the last submission, Wet Pond 3A has been eliminated entirely from the Post Development Sub Watershed Plan and Wet Pond 4 has been converted into a larger wet pond, named "Wet Pond 3". The specific location and intended function of the flush curbs as noted in the applicant's response is not clear from our review.

Water Quality

2. The proposed wet ponds currently do not meet TSS removal requirements for 80% removal as designed and there are also significant discrepancies between the design plans and supporting calculations for the proposed structures. Currently, the storage representation in the plans and calculations is not consistent for Wet Pond 1. The volume in the calculations is overrepresented compared to what is depicted in the project design plans. The NJ BMP Manual states that the minimum required ratio of the permanent pool volume to the Water Quality Design Storm volume is 1:1. Wet Pond 5D does not appear to meet the requirements for TSS removal of 80% as the ratio is less than 1:1.

There are three proposed wet ponds included in the development. Wet Pond 2B provides a 2:97:1 ratio of permanent pool volume to stormwater quality storm runoff volume with an extended detention time of 12 hours. The resulting TSS removal rate is 85%. Wet Pond 3 provides a pool volume ratio of 3:1 with more than 24 hours of extended detention. The resulting TSS removal rate is 90%. Wet Pond 5D provides a pool volume ratio of 1.16:1 with 24 hours of extended detention. The resulting TSS removal rate is 81%.

The plan revisions adequately address this comment.

3. Wet Ponds 5D and 2B are both also prone to short-circuiting because the inflow outfalls are very close to the outlets creating a shortened residence time and therefore cannot meet the 80% TSS removal rate. Furthermore, there are two (2) copies of "Wet Pond A" Pond Reports found in the Stormwater Management Report. Inconsistent labeling of wet ponds and stormwater management facilities does not allow for proper review and analysis of the proposed design. Details for Wet Pond Profile 1 and 2 are inconsistent.

The wet ponds have been renamed and refined based on the redesigned Marine Terminal layout. Updated plans, calculations, and sections are provided in the submission documents. The outlet structures for Wet Pond 5D have been relocated to accommodate the new outfall location. The outlet control structure locations for Wet Pond 2B are based on the outfall locations and New Jersey Standards for Soil Erosion and Sediment Control (SESC). Specifically, the SESC standards require the outfalls to be separated by a minimum of 50 feet. Additionally, we have strategically located the outfalls to avoid wetlands disturbance. Revised routing calculations indicate runoff from the water quality storm will be detained for 12 hours.

The locations of the outlets for Wet Pond 5D and 2B have been revised to reflect this comment.

- 4. The hydrograph summary report for the manufactured water quality devices lists the Jellyfish 12 peak flow is over 12 cfs, which exceeds the maximum design treatment flow rate listed in Table 1 (approximately 4 cfs) in the certification letter. The call-outs for the Jellyfish 12 are inconsistent in the plans and water quality summary. Finally, the design flow rate for the Vortechs 1421 has not been provided in the certification letter.
- The underground basin and MTD configuration has been revised based on the new marine terminal layout. Watershed 5C is treated by four Jellyfish-12 devices in series, which are capable of treating up to 4.63 cfs individually or up to 18.52 cfs collectively. The water quality peak discharge is 17.67 cfs, which will be distributed evenly to each device. The Vortechs PC1421 MTD is the manufacturer's model number for the Vortechs 16000. For clarity, DRP's plans have been revised to indicate the Vortechs 16000 device.

This item has been addressed.

- 6. The wetlands located in and around the project site will likely be adversely impacted by the development and its proposed stormwater management features. As designed, the closed wetland system located in Marine Terminal South will likely be negatively impacted (drained) as a result of the fact that the wetland is located at an elevation of approximately six (6) feet, which is three (3) feet higher than the stated normal water surface elevation of Wet Pond 3A. Wet Pond 3A also appears to have a lowest orifice elevation stated to be at an elevation of 4.75, which is inconsistent with the stated anticipated normal water surface. Similarly, the outlet of Wet Pond 4 is also well below the wetland and may also serve to artificially lower the groundwater table thereby negatively impacting the regulated wetland. Depth to groundwater should be provided in order to determine if and how the wet ponds will be impacted by the groundwater table and if the basins will draw water from the wetlands. It is unrealistic to suggest that the wetland may not be impacted as it is indicated in the plans.
- The revised layout for Marine Terminal South includes Wet Pond 3, which has been designed with a normal water surface elevation (NWS) of 3.0. The adjacent wetlands are located at elevations 2.0 4.0. The proposed pond NWS is based on an evaluation of soils throughout the site and the observation of standing water at lower elevations. Furthermore, DRP proposes to line the wet pond with a clay liner to ensure that the pond does draw groundwater or drain the wetlands. It is Langan's professional opinion that DRP is proposing a pond in an appropriate location on the tract with a normal water surface that will not jeopardize the viability of the adjacent wetlands.

The wet ponds are proposed with a clay liner as shown on the detail on Sheet C-506. However, the detail notes that the clay liners are not to be installed where groundwater is encountered. Therefore our original comment still stands and as designed the wet ponds with normal water surface elevations near or below adjacent wetlands will be prone to artificially lower the groundwater table and impact adjacent sensitive habitat.

8. The design criteria for wet ponds in the NJ BMP Manual states the minimum inflow must be 20 acres or a water budget analysis must be provided. Wet Pond 2 has 17 acres of drainage and Watershed 1A in the Marine Terminal South is approximately 13 acres. No water budget analysis is provided.

For clarity "Wet Pond 2" has been renamed "Wet Pond 2B" to match the name of its respective watershed. Wet Pond 2B has a drainage area of 14.52 acres, which is less than the 20-acre requirement. A water budget analysis has been added to the revised Stormwater Management Report under Section 3.8 to demonstrate that the normal water surface elevation of the pond will be sustained throughout the year. Supporting calculations can be found in Appendix G. Wet Pond 3 has a drainage area of 17.6 acres, which is less than the 20-acre requirement. A water budget analysis has been added to the revised Stormwater Management Report under Section 4.9 to demonstrate that the normal water surface elevation of the pond will be sustained throughout the year. Supporting calculations are provided in Appendix O. All other wet ponds have a contributing area greater than 20 acres.

This item has been addressed. No further response is necessary.

9. Finally, massive portions to the western part of the site are not proposed to have any water quality treatment measures whatsoever. The applicant argues that since there is no vehicular traffic they need not provide any water quality measures. However, proposed use of the site is high intensity and industrial; including storage of large quantities of hazardous material. Therefore, regardless of what the potential amount of vehicular traffic may or may not be, the site represents a water quality "hot spot" requiring comprehensive water quality treatment. The failure to treat stormwater runoff from impervious surfaces represents a conflict with New Jersey's water quality standards.

The stormwater management regulations require water quality measures for impervious areas only. Traditionally, gravel areas do not represent an impervious surface; however, we recognize the intent of the regulations and have provided water quality measures for all gravel surface areas that have the potential for vehicle traffic. The decision to omit water quality measures from the areas within the containment berms was based on discussions with NJDEP stormwater management reviewers. The bermed containment areas will be equipped with sensors and infrastructure that provide the ability to capture all liquid and prevent contaminants from being discharged to the downstream waterways. All stormwater runoff from impervious surfaces and gravel areas exposed to vehicular traffic are proposed to be treated in compliance with the State's water quality standards.

No further explanation is given regarding what type of "sensors and infrastructure" are proposed, it is assumed that these items are likely associated with emergency spill response measures. Our comment specifically related to the non-point source

water quality issues that should be expected from an area that would be expected to product comparatively high levels of non-point source pollution. Furthermore, the gravel area is completely lined and is therefore impervious.

Groundwater Recharge

Section 3.5 of the stormwater management report states that "...there will be no post development annual recharge volume deficit" since the site is not mapped to provide any groundwater recharge under existing conditions. However, undoubtedly the site currently provides some amount of shallow groundwater recharge which may partially support surrounding freshwater wetlands. Under proposed conditions the site's impervious coverage will increase by more than 100 acres; eliminating any groundwater recharge.

According to N.J.A.C. 7:8-5.6(b)1, the New Jersey Geological Survey Report GSR-32 A Method for Evaluating Groundwater-Recharge Areas in New Jersey may be used to calculate and ultimately demonstrate compliance with the NJ standards for groundwater recharge. Based on the NJDEP Annual Groundwater Recharge Analysis Spreadsheet (based on GSR-32) the proposed development will not create an annual deficit in groundwater recharge. The soils in and around the proposed area of improvements are Hydrologic Soil Group D, which are categorized by wet clayey soils that prevent water from recharging the underlying aquifers.

We agree the Groundwater Recharge Analysis Spreadsheet suggests that there is no groundwater recharge in the existing condition. However, we reiterate that the site currently provides some amount of shallow groundwater recharge which may partially support surrounding freshwater wetlands. The site's impervious coverage will increase by more than 100 acres; eliminating any groundwater recharge.

Peak Flow Rate Control

As stated previously, the applicant has indicated that a large portion of the site is exempt from the peak flow rate requirements, in accordance with NJAC 7:8-5.4(a)3iv. Specifically they assume that the northern portion of the site which drains directly to the Delaware River is exempt.

11. In the Marine Terminal North Pre-Development Watershed Plan Drawing DA101 and Marine Terminal Southern Area Drawing WB301, the time of concentration drainage path does not start at the edge of the sub-watershed, thereby effectively reducing the apparent time of concentration under existing conditions. The calculations should be revised to reflect appropriate travel lengths. Under post development conditions, watershed DA-2b has a sheet flow length of 350 feet, much greater than the 100 feet limit which is generally accepted.

The watersheds have been redefined based on the revised marine terminal layout. The time of concentration paths have been revised accordingly. A maximum sheet flow path length of 150 feet is assumed, which is generally accepted under NRCS TR-55 methodology.

This item has not been addressed. The flow length for Watershed DA-2B has not revised from 350 feet in the latest submission.

12. The pre-development and post-development curve numbers used in the applicant's analysis are inappropriate for the project site. The gravel substrate to be used across the site was represented by a lower Curve Number (CN) than is appropriate for this type of land use in accordance with standard engineering practice. The CN selected by the applicant, per TR-55, is applicable only to gravel roads and streets including a pervious right of way (which does not exist in this application). In order to more accurately reflect the runoff from gravel parking lots standard engineering practice would dictate use of a CN value of 96 as being reasonable for the gravel roadway surface itself. The supporting calculations for the project use a CN value of 91. Furthermore, the CN value for any of the gravel areas where an impervious liner is proposed should be 98.

The selection of a CN value of 91 for gravel areas is appropriate given the proposed use of those areas. The vast majority of proposed gravel areas will not be exposed vehicular traffic, meaning the gravel will not be compacted such that a higher CN would be appropriate.

We reiterate that if an impervious liner is proposed, then the area should be expected to have the hydrologic response of an impervious surface (CN = 98).

Flood Hazard Area+

The proposed project requires an individual Flood Hazard Control Act Individual Permit and thus must fully satisfy the applicable requirements of (N.J.A.C. 7:13), However rather than illustrate compliance the applicant relies on rhetoric. The applicant's letter dated December 9, 2016 in response to the project's technical deficiencies indicates that the design was modified to "further reduce overall land disturbance and impacts to environmental features, including wetlands". The applicant appears to fixate on the reduction of wetlands impacts while ignoring the impacts to the flood hazard area and riparian zone. A review of the development reflects a very similar footprint with minor adjustments to the "Logistics and Value Added Area". This area was shifted to the south and is not contiguous with the other section of the Marine Terminal as a way to minimize impacts to the forested wetland complex. A notation exists on the plans stating that the proposed project lies within the Special Flood Hazard Area as indicated on the FEMA Map No. 34015C00058F dated August 17, 2016 but the elevation does not appear on the plans. G-103 entitled, "Flood Hazard Verification" was provided in the plan set. It is

stated in the Compliance Statement that a FEMA Method 2 delineation of the Flood Hazard Area was performed, however an Engineering Report detailing the delineation of the FHA has still not been provided. A Riparian Zone Boundary (Sheet C-003) sheet has been added to the plan set as required for all Individual FHA Permit applications. The temporary versus permanent riparian zone disturbance areas are not apparently obvious. The follow table was provided to reflect the riparian zone disturbance:

Table 4 – Summary of Resource impacts reflects the following as it relates to Riparian Zone Disturbance

Resource	Resource Value	Permanent	Temporary	Undisturbed (Ac)	
		Disturbance (Ac)	Disturbance (Ac)		
Riparian Zone	Vegetated	3.036	0.489	9.513	
	Non-Vegetated	2.252	0.228	3.913	

The applicant continues to state that per NJAC 7:13-11.2(p) that the project is a water dependent development along a tidal water that will obtain a CZM Permit and that there is no limit on disturbance to vegetation in the riparian zones and no mitigation is required or proposed. Importantly, the application conveniently omitted relevant portions of NJAC 7:13-11.2(p) that directs an applicant for a FHA individual Permit to the definition of water dependent development at NJAC 7:7-1.5. This definition states that "Water dependent" means development that cannot physically function without direct access to the body of water along which it is proposed. The definition goes on to state that "uses, or portions of uses, that can function on sites not adjacent to the water are not considered water dependent". The definition at NJAC 7:7-1.5 cannot be any clearer as it provides an example that states "in a maritime operation, a dock or quay and associated unloading area would be water dependent, but an associated warehouse would not be water dependent. The applicant's position that riparian zone impacts are limitless is therefore obviously flawed. Since portions of the project are not water dependent and in those areas riparian zones impacted by non-water dependent uses must be fully accounted for and described in the application. As such any proposed buildings, warehouses and their accompanying parking lots that are not consistent with the definition of a water dependent use must therefore account for impacts to riparian zones as part of the application.

In addition, the applicant's interpretation of the rules remains unchanged. They continue to circumvent the regulations in their entirety. As the FHA rules specifically reference compliance with the Coastal Zone Management Rules with regard to water dependent uses, the riparian zone limits would be restricted to those portions of the site located within the Coastal Zone. Sheet C003 of the plan set indicates that the Coastal Zone is limited to the portion of the site immediately adjacent to the Delaware River. In accordance with NJAC 7:7E-1.2 the extent of the coastal zone is 500 feet from the mean high water line. As such any portion of the site outside of NJDEP's definition of the coastal zone would not be covered by NJAC 7:13-11.2(p) and thus require compliance under a different standard.

Moreover, the FHA regulations also state that "for any proposed water dependent development, the application must demonstrate that there is no other feasible location onsite to construct the development that would reduce or eliminate the area of riparian zone vegetation to be cleared, cut and/or removed. The applicant has now provided an Alternatives Analysis whereby they conclude that "there is no suitable alternative site for this project in the region and DRP has selected a redevelopment program that minimizes environmental impacts by concentrating the project within previously disturbed areas that housed over a century of industrial development". The applicant explains that site has been designed to coincide with the previous development where the development was concentrated in the northern waterfront area. The proposed pier and ship berth coincides with the existing deteriorated wharf and berth minimizing the amount of new dredging. An open platform structure is proposed to extend beyond the current footprint of the wharf by the open structure avoiding fill in open water. The applicant further explains that the development plans have "undergone several design iterations in order to reduce impacts to the wetlands, riparian zones and other regulated resources to the maximum extent practicable without impacting the overall project purpose". The applicant does not consider reducing the scope of their project area to minimize or avoid potential environmental impacts.

The alternatives analysis provided an evaluation of the following properties:

- 1. Existing SJPC facilities in City and County of Camden
- 2. DuPont property in Carney's Point, Salem County
- 3. Ferro Industrial site in Logan Township, Gloucester County
- 4. Raccoon Island Site in Logan Township, Gloucester County
- 5. Former BP Oil Terminal Site in Paulsboro, Gloucester County
- 6. Former DuPont Repauno site in Greenwich Township, Gloucester County
- 7. Southport Brownfield Development Area in Gloucester City, Camden County
- 8. Penn Terminal site in Eddystone, Delaware County, PA
- 9. Southport Marine Terminal Complex in Philadelphia, Philadelphia County, PA.

	The below table was	s reported and	ranked the im	pacts for the	various sites.
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	No Action Alternative	SJPC Camden Terminals	DuPont Carney's Point	Ferro Industrial Site	Raccoon Island	Paulsboro Marine Terminal	Former DuPont Repauno Site	Southport Brownfield	Penn Terminal	Southport Marine Terminal
Environmental	No	2 – Low	4 – High	5 –	5 –	3 –	2-3 Low	4 – High	3 –	3 –
Impacts	Impact	Impact	Impact	Highest Impact	Highest Impact	Medium Impact	to Medium Impact	Impact	Medium Impact	Medium Impact
Project Purpose	Not Met	Not Suitabl	Suitable	Not Suitabl	Suitable	Not Suitabl	Suitable	Not Suitabl	Not Suitabl	Not Suitabl
Logistics	N/A	Not Favorabl	Not Favorabl	Not Favorabl	Not Favorabl	Not Favorabl	Favorabl e		Not Favorabl	Not Favorabl
Cost	N/A	Modera te Cost	Modera te Cost	Highes t Cost	Highes t Cost	Lowes t Cost	Modera te Cost	High Cost	Modera te Cost	Modera te Cost
Technology	N/A	Required	·	May be Require	Not Require	Not Require	Not Require	May be Require	Required	May be Require

While all sites are redevelopment sites with environmental constraints, the applicant concluded that the DRPs objective for the Marine Terminal would be best suited for the former DuPont Repauno Site. Although the site contains all the amenities that are required for a marine terminal the environmental resources have not been clearly and objectively shown to be protected to the maximum extent practicable. Moreover, as previously indicated full compliance with the riparian zone requirements of the FHA remains unsatisfied.

It seems unlikely that any riparian vegetation associated with the many regulated waters onsite could be sacrificed as part of this project without further evaluation. It does not appear that that the applicant will provide mitigation for the cleared riparian zone vegetation as the applicant states in the compliance statement that pursuant to NJAC 7:13-11.2(p) and tables 11.2, there is no limit on disturbances to riparian zones in tidal areas for water dependent uses provided that the disturbance is justified. This element of the FHA rules has not been established and based on the language of NJAC 7:13-11.2(p) the absence of any riparian zone impact limit if justified would be restricted to the portion of the site in the site considered to be regulated under the Coastal Zone Management Rules. Based on the plan sheet entitled Upland General Arrangement Plan Riparian Areas, sheet C-003, Index 38 of 156, the Coastal Zone is limited to the portion of the site immediately adjacent to the Delaware River.

The applicant states in the compliance documents that all proposed buildings will be located at least 25 feet from the top of the bank or edges of water. Furthermore, all proposed buildings

will be designed to withstand flooding pressures up to the FFE elevation. The plans indicated that the FFE is 11.00 feet.

Dredging within a portion of the Delaware River is necessary to make the proposed port accessible to vessel traffic from the federal navigation channel. With regard to NJAC 7:13-11.1 Requirements for a regulated activity in a channel, the compliance statement mentions the proposed dredging and the consequent permanent placement of fill within the Process Ditch, a portion of which is a regulated water and the balance a permitted wastewater treatment ditch. The applicant states that the "process ditch must be filled in order to construct the project in a way that meets the project purpose. The Process Ditch is a man-made ditch originally constructed to convey industrial wastewater, which now serves as part of a stormwater management system".

The applicant states in the Compliance Statement and Alternatives Analysis that the project has been "substantially reduced and reconfigured to avoid impacts to regulated areas, including riparian zones and regulated waters. Disturbance to the channel has been reduced to the maximum extent practicable and the activities proposed within the regulated channels are required to meet the purpose of the project". Details to demonstrate channel stability are still not clearly defined as required by the regulation. It would follow that issues could result from potential channel instability due to the placement of fill. More importantly key elements of this section of the FHA such as NJAC7:13-11.1(b)2 were not included in the compliance statement. This requirement states that "[D]isturbance to the channel is eliminated where possible; where not possible to eliminate, disturbance is minimized through methods including relocating the project and/or reducing the size or scope of the project. No discussion regarding compliance with this section of the regulation was provided.

Lastly, no attempt was made to illustrate the project's compliance with NJAC 7:13-11.1(c) which includes the following; "[T]he Department shall issue an individual permit for a channel modification only if the applicant demonstrates that, in addition to meeting the requirements of (b) above, the channel modification meets at least one of the following requirements: 1. The channel modification is necessary to improve the ecological health of the regulated water and its riparian zone, or to control existing flooding or erosion which poses an immediate threat to life, property or a lawfully existing structure; or 2. The channel modification is necessary for the construction of a bridge or culvert, and the following requirements are satisfied: i. The disturbance to the channel is the minimum necessary to successfully implement the project; ii. A bridge is constructed rather than a culvert, where feasible; iii. The length of channel covered by a bridge or enclosed in a culvert is the minimum feasible; and iv. No more than 200 linear feet of channel (including the bridge or culvert) is disturbed unless the applicant demonstrates that disturbance to a longer segment of channel cannot feasibly be avoided. It is clear from the above requirement that impacts to channels are viewed seriously by the NJDEP and no provision for the elimination of a channel is provided. Full compliance with all elements of this regulation must be required of the applicant. If an applicant is unable to comply with this regulation a hardship exception would be required. It is assumed that this is the reason for the hardship

exception but not definite as this section of the regulation is not addressed in the compliance documents.

With regard to NJAC 7:13-11.6 - requirements for a regulated activity in or affecting a present or documented habitat for threatened and endangered species, the Natural Heritage Database does not indicate that there are any threatened and endangered species that are critically dependent on the regulated waters for their survival. The applicant states in their application documents that no vegetation within 1,000 feet of the identified bald eagle nest will be disturbed. The applicant states that "out of abundance of caution, the project has been redesigned to avoid disturbing more than 20 acres of contiguous wooded habitat. Additionally, in areas of potential roasting habitat, tree removal will be avoided to the maximum extent practicable during summer roasting season from April through September 30". Impacts to the Atlantic and shortnose Sturgeon will be avoided by conducting work within the recommended construction window and implementing dredging best management practices. The applicant stated that "given the nominal estimated increase in ship traffic, it is unlikely that there will be significant adverse impacts to the Atlantic or shortnose sturgeon as a result of the proposed project". It appears that this comment has been addressed by the applicant.

NJAC 7:13-12.1 (Requirements that apply to all regulated activities) requires that the regulated activities not cause a significant and adverse effect on: water quality, aquatic biota, water supply, flooding, drainage, channel stability, T&E species, navigation, energy production and fishery resources. The applicant states that through the use of BMPs and appropriate erosion control measures sediment runoff to the Delaware River and other waterways will be minimized. The applicant states that post construction drainage will be redirected into stormwater management facilities and construction of the site will not adversely affect drainage on the project site. More discussion and comments related to the project's proposed stormwater management and compliance with NJAC 7:13-12.2 is provided in the Stormwater Management section of this letter above.

With respect to NJAC 7:13-12.3 (Requirement for excavation, fill and grading activities), the compliance statement states that a portion of the Process Ditch will be filled in order to facilitate proper internal circulation between internal areas of the Marine Terminal. Under existing conditions, the Process Ditch is the site's major internal waterway. A large portion of the Process Ditch will be completely filled/eliminated under proposed conditions; including an estimated 1,000 linear feet of the regulated portion of the waterway which has a drainage area of greater than 50 acres. In fact, the drainage area of the portion of the waterway to be filled/eliminated is as large as 120 acres. No adjustments to the design have been made to address comments relative to excavation, fill and grading activities.

The applicant states that the application complies with NJAC 7:13-12.4 Requirements for a structure, however, no details or notes are provide on the plans to reflect compliance for structures within the regulated area, other than the FFE is 11.0. In addition and in accordance with NJAC 7:13-12.4(d) for structures located adjacent to channels, channel erosion must also be addressed.

The compliance statement also states that it is not feasible to construct the proposed rail line and private roadway and parking area one foot above the Flood Hazard Area Design Flood elevation, per NJAC 7:13-12.6 (requirements for a railroad, roadway and parking area). Drawings C-101 through C-123 indicated that some of the parking spaces and access driveways will not be constructed above the regulatory flood hazard area elevation. Most driveways will be situated at or above the flood hazard area elevation. However, due to the existing road elevations, the applicant states that it is not "feasible to construct all the 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 elevations will be signed per NJAC 7:13-12.6(f)v. Unfortunately, the application has not provided the justification to support this claim.

As discussed in this review letter this application remains deficient as it continues to fail to adequately address regulatory compliance starting with its failure to clearly identify the areas covered by various regulations including the Freshwater Wetlands Protection Act, Flood Hazard Area Control Act and the Waterfront Development Rules. For example, although the application has now identified the Coastal Zone, the applicant continues to apply its importance beyond its regulatory limits. For example, although the area of the site under Coastal Zone jurisdiction may be considered for a water dependent use, as it relates to riparian zones those areas outside of the coastal zone should be reviewed solely under the requirements of the Flood Hazard Control Act. In the absence of this fundamental step in the regulatory process, it remains difficulty to understand how this project complies with all of the relevant New Jersey regulations. The failure to accurately apply the limits of the Coastal Zone is apparent in the applicant's calculations of the impervious cover limits in which the entire site is included. Please refer to Sheet C-003 to see the actual limit of the Coastal in which the Coastal Zone rules apply. As previously mentioned the maximum extent of the Coastal Zone in this part of New Jersey is 500 feet from the Mean High Tide line. It appears that the numbers provided are based on the land area of the 371 acre project site rather than that of the subset of the land that constitutes the Coastal Zone.

In addition, the level of ecological impact assessment associated must be commensurate with the magnitude of this project. In other words the application must rely on facts in which to base its position; that the project will or will not have significant impacts rather than rhetoric. For example, the applicant indicates that "regulated portions of the Process Ditch must be filled in order to construct the Project in a way the meets the project purpose.



The Process Ditch is a man-made ditch originally constructed to convey industrial wastewater, which now serves as part of a stormwater management system for the Property". The issue of concern is that the Process Ditch is a regulated water with a riparian zone and as indicated on the 2016 photograph a forested riparian zone. The filling of the Process Ditch related to the flood hazard rules is described as follows; "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." As previously stated the regulations do not include this area as being part of the proposed water dependent use so impacts warrant mitigation as well as an alternatives analysis that seeks to avoid and minimize impacts. Moreover, the use of rhetoric to quantify impacts is inappropriate for a project of this magnitude. In addition, due to the forested nature of the riparian zone impacts it should be readily apparent that project impacts will go well beyond aquatic biota and should also evaluate migratory birds including waterfowl, wading birds, shorebirds and passerines. The assessment of impacts for this loss of a regulated water and riparian zone lacks a sufficient level of ecological analysis to justify the project and indicate that the project will not result in a significant adverse impact. This loss of this resources is especially problematic in that it is at the headwaters of a larger downgradient system. Lastly, instead of seeking to avoid regulated impacts the applicant instead simply indicates that the filling proposed "within regulated channels is required to meet the basic purpose of the project" and that the "selected site configuration minimizes impacts to the riparian areas the maximum extent practicable". It should be readily apparent that statements such as these simply serve as an apology for the project without any realistic attempt to minimize impacts. As with all large redevelopment projects the applicant's ideal project should not dictate the extent of regulated activities and as in this case, there is ample opportunity to avoid impacts by reducing the size of the project.

The proposed project contemplates a sufficient amount of regulated impacts to warrant a public hearing. In accordance with N.J.A.C. 7:7A-12.4 we recommend that a public hearing be scheduled to discuss the issue raised in this letter as well as any other relevant regulatory and environmental issues.

This concludes our initial review of the DRP Gibbstown Logistics Center. We reserve the right to make additional comments in the future as it becomes necessary. I look forward to meeting with you to discuss this report in detail and answer any questions that you may have. Please do not hesitate to contact me with any questions. We appreciate the opportunity to provide you with these services.

Sincerely,

Mark Gallagher Vice President Clay Emerson, Ph.D. PE CFM Senior Project Manager

ΚK

Cc: Kelly Klein

Encl: (0)