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March 8, 2024

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
THIRD NOTICE OF PROJECT CHANGE

PROJECT NAME	: Town of Orleans – Amended Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY	: Orleans
PROJECT WATERSHED	: Cape Cod
EEA NUMBER	: 14414
PROJECT PROPONENT	: Town of Orleans
DATE NOTICED IN MONITOR	: February 7, 2024

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (310 CMR 11.00), I hereby determine that this project change **does not require** an Environmental Impact Report (EIR).

Original Project and Procedural History

The Town of Orleans prepared a Comprehensive Wastewater Management Plan in 2010 (the "2010 CWMP") which proposed structural and non-structural measures to achieve reductions in nitrogen loading to coastal embayments. These components were to be implemented over a 20-year period and proposed: construction of a new centralized Wastewater Treatment Facility (WWTF), with a treatment capacity of 640,000 gallons per day (gpd) at the Tri-Town Septage Treatment Facility on Overland Way; installation of 74 miles of sewer pipes and 63 pump stations in six construction phases to treat wastewater from 2,800 properties along Pleasant Bay, Town Cove, and the Nauset and Rock Harbor watersheds (referred to as the Core Program); an adaptive management plan (AMP) that includes measures to ensure compliance with Total Maximum Daily Load (TMDL) requirements, monitoring for nitrogen loading reductions, and making changes to the 2010 CWMP as necessary in response to new

data; and a "Regional Program" to evaluate opportunities to accommodate additional wastewater flows from Eastham and/or Brewster.

The 2010 CWMP was presented for MEPA review through an Expanded Environmental Notification Form ("EENF") filed in 2010. The Certificate on the EENF required the filing of a Single EIR. The Certificate on the Single EIR for the 2010 CWMP was issued on January 28, 2011 and indicated that it adequately and properly complied with MEPA and its implementing regulations. The Town submitted a Notice of Project Change (NPC) in November 2018 ("NPC1") which proposed to shift the location of the effluent disposal site from the Tri-Town Septage Treatment Facility to 32 Lots Hollow Road and identified 43 Lots Hollow Road as a reserve site. On December 7, 2018, a Certificate on NPC1 was issued which determined that the potential impacts associated with the project change did not require an EIR. Construction of the initial phase of the WWTF with a capacity of 350,000 gpd was completed in 2023. A collection system serving the downtown area of Orleans has been completed and conveys approximately 130,000 gpd to the WWTF.

The second NPC ("NPC2") was submitted in March 2019 to incorporate the following two demonstration projects into the 2010 CWMP: a permeable reactive barrier (PRB) at Eldredge Park and oyster aquaculture in Lonnie's Pond. These demonstration projects utilized non-traditional technologies to remove nitrogen and were not previously included within the 2010 CWMP. Both demonstration projects were deployed in 2016. NPC2 also provided an update on wastewater planning activities that have occurred since the 2010 CWMP. The Certificate on NPC2 was issued on April 19, 2019, and did not require the filing of a Supplemental EIR; however, it specified that an Amended CWMP which the Town was required to prepare by the end of 2023 as a condition of the Pleasant Bay Watershed Permit issued by MassDEP in August 2018 must be submitted as a separate NPC for MEPA review.

Third Notice of Project Change

This third NPC ("NPC3") included an Amended CWMP (ACWMP), as required by the certificate on NPC2, which builds upon earlier studies and data collection completed for the 2010 CWMP and associated Single EIR, and provided an update on the additional planning and engineering efforts that have been completed since the 2010 CWMP and the two subsequent NPCs. The ACWMP continues to propose all components included in the 2010 CWMP with the changes described below. Changes to the 2010 CWMP identified in NPC3 and the ACWMP include the following:

- Within the limits of sewering proposed in the 2010 CWMP, the sewer phase boundaries have been revised such that an additional 180 properties will be connected to the sewer system.
- The completion date of the collection system has been extended from 2032 to 2067.
- The final design capacity of the WWTF has increased from 640,000 gpd as proposed in the 2010 CWMP to 700,000 gpd.
- The design of the proposed collection system has been revised to rely more on gravity sewer and less on low pressure sewers; as a result, compared to the 2010 CWMP, the length of sewer mains has decreased from 74.9 miles to 48.5 miles and the number of pump stations has decreased from 50 to 14.
- The location of a new PRB has been selected and three other potential sites have been identified for further evaluation.
- Based on analyses of potential non-traditional nitrogen technologies selected for evaluation

in the 2010 CWMP and NPC2, the Town will not implement any additional aquaculture or non-traditional technologies as part of the ACWMP.

These changes are further described below. The table below provides a summary of the differences between the 2010 CWMP and the ACWMP (included as Table 3-1 in NPC3).

		2010 CWMP	2023 ACWMP
Properties Served by Wastewater Collection	Pleasant Bay Watershed	1,680	1,755
	Nauset Watershed	880	914
	Rock Harbor Watershed	270	311
	Total	2,800	2,980
Length of Sewers		390,000 linear feet	255,974 linear feet
Total Number of Pump Stations		140	12
Wastewater Treatment Design Annual Average Flow		640,000 GPD	700,000 GPD
Effluent Disposal Method		Rapid Infiltration at Wastewater Treatment Facility	Wick Wells at 32/43 Lots Hollow Road*

*The existing wick wells at 32/43 Lots Hollow Road are sufficient through approximately 500,000 gpd discharge flow, which is predicted to be exceeded after Phase 12 in approximately 2055, at which time additional discharge locations will be needed

Project Site

The WWTF is located in northeastern Orleans at a 26-acre site at 29 Overland Way near the intersection of Route 6 and Route 6A. The effluent disposal wick wells are located on two Town-owned parcels at 32 Lots Hollow Road (3.88 acres) and 43 Lots Hollow Road (1.77 acres) located south of the Route 6 and Route 6A interchange. As previously described in the EENF and Single EIR, the wastewater collection system will be constructed within existing roadway rights-of-way (ROW) within the areas proposed to be sewered.

Sewers will be constructed within an Environmental Justice (EJ) population designated as Income located near the downtown area. The WWTF and collection system have been or will be constructed within one mile of an EJ population designated as Income located in Eastham, and within 5 miles of additional EJ populations designated as Income located in Eastham, Chatham, and Brewster.[1]

[1] As the EENF for the original project (as well as the Single EIR and two subsequent NPCs) were filed well before the effective date of new MEPA EJ regulations and protocols in January 2022, the project change was not subject to these new rules.

Environmental Impacts and Mitigation

As previously identified in NPC1, construction of the WWTF and effluent discharge areas was anticipated to alter 4 acres of land and add 4 acres of impervious area. The activities proposed in NPC2 impacted six square feet of the Land Under Water (LUW). No additional environmental impacts were identified in NPC3.

Measures to avoid, minimize, and mitigate environmental impacts include: the use of erosion and sediment control measures during construction, implementation of dust control measures, restrictions on work hours, limiting areas of disturbance by locating work within previously disturbed areas where possible, and, for the Lonnie's Pond aquaculture project, implementation of a comprehensive water quality monitoring plan for Lonnie's Pond and implementation of other measures to minimize use of black floating bags to minimize visual impacts, requirements for annual removal of aquaculture gear, commitments to address abutters concerns (visual impacts, noise, restricting work hours, limiting parking), and rotating oyster bags across several locations.

Jurisdiction and Permitting

The 2010 CWMP was required to undergo MEPA review and was subject to preparation of a Mandatory EIR pursuant to 301 CMR 11.03(5)(a)(3) of the MEPA regulations because it requires Agency Actions and will result in the construction of one or more new sewer mains of ten or more miles in length. Implementation of the 2010 CWMP required a Groundwater Discharge Permit (GWDP) from the Massachusetts Department of Environmental Protection (MassDEP) and may require Non-Vehicular Access Permits from the Massachusetts Department of Transportation (MassDOT). The aquaculture demonstration project in Lonnie's Pond required certification of the private shellfish aquaculture license pursuant to MGL c. 130 § 57 from the Division of Marine Fisheries. These thresholds and permits continue to apply to the ACWMP.

Implementation of the ACWMP will require an Order of Conditions from the Orleans Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP) and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA). It may require a Section 404 Permit from the U.S. Army Corps of Engineers (ACOE) and Federal Consistency Review by the Office of Coastal Zone Management (CZM).

The Town has applied for Financial Assistance in the form of a $45 million loan from the Clean Water State Revolving Fund (SRF) to plan, design, and implement the ACWMP. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations.

Review of NPC3

NPC3 included a copy of the ACWMP, which is a comprehensive, standalone wastewater management plan that amends and supersedes the 2010 CWMP with updated data, analysis, and project design and phasing. The ACWMP described changes to the 2010 CWMP and provided updates on the

status of the Town's wastewater management program and nitrogen removal targets. It included technical appendices containing summaries of hydrogeological investigations, a review of the Lonnie's Pond aquaculture program, analyses of potential locations for additional PRBs, and evaluations of additional aquaculture and non-traditional technologies. NPC3 briefly reviewed climate resiliency measures incorporated into the project design.

Amended Comprehensive Wastewater Management Plan (ACWMP)

As detailed below, the ACWMP described changes to the 2010 CWMP and provided updates on the Town's implementation of previously-reviewed nitrogen control efforts, including fertilizer and stormwater management.

Sewer phase boundaries and construction schedules

The Town has revised the sewer phasing and the anticipated construction time frame for each phase. The updated phases correspond to the "Core Area" sewer area limits identified in the 2010 CWMP, but construction will occur in 16 phases (rather than 6 phases as originally proposed) based on consideration of priorities for nitrogen removal as well as sewer connectivity and associated construction logistics. The updated service areas also provide the Town with flexibility for scheduling and combining areas, depending on funding availability and other Town priorities. The completion date for sewering the Core Area has been extended from 2032 to 2067 to allow the Town to address other financial needs and assess the continuing studies on PRBs and nitrogen attenuation. The design of the proposed sewer system has been revised to use more gravity sewers and fewer low-pressure force mains; as a result, the total length of sewer mains has decreased from 74.9 miles proposed in the 2010 CWMP/Single EIR to 48.5 miles, and the number proposed pump stations has decreased from 50 to 14. As noted above, the first phase of sewering has been completed. According to the ACWMP, the second phase of sewering, to be completed in 2025, will collect and convey an additional 82,000 gpd of flow from the Meetinghouse Pond area to the WWTF.

The initial phase of the WWTF has been designed and constructed with a capacity of 350,000 gpd so that it can easily be expanded to 700,000 gpd in its final configuration; according to NPC3, the increase in capacity of the final WWTF from 640,000 gpd (as previously proposed) to 700,000 gpd is due to the cost-effectiveness and operational benefits of doubling the treatment systems, rather than due to any significant increase in anticipated future wastewater flow to be collected and treated (approximately 602,000 gpd at the completion of sewering in 2067). According to the ACWMP, the expanded WWTF is likely to be needed by the late 2030s to early 2040s.

Permeable Reactive Barrier Sites

The ACWMP reviewed the potential viability of PRBs in the Nauset Estuary, Rock Harbor, and Pleasant Bay watersheds. Assessments for nitrogen removal effectiveness in these locations included evaluations of the dimensions of the proposed PRBs, groundwater flow direction, upgradient wastewater nitrogen source density, and expected adherence to PRB nitrogen remediation goals. In the Nauset Estuary watershed, additional geotechnical and hydrogeological evaluation are needed to confirm the efficacy of a PRB at a potential location known as the Norseman site. No potential PRB sites were identified in the Rock Harbor watershed sites for further examination. In the Pleasant Bay watershed, the

Duck Hole site was recommended for installation of a PRB. Two other sites, the Mayflower and Lockwood sites, were selected for further consideration based on their location relative to groundwater flows and their position in the watershed, which maximizes potential for intercepting and treating nitrogen in the groundwater. The Mayflower and the Lockwood PRB sites are located within the Pleasant Bay Area of Critical Environmental Concern (ACEC) and the Duck Hole PRB site is located partially within the Pleasant Bay ACEC and partially within an area mapped by the Natural Heritage and Endangered Species Program (NHESP) as Priority Habitat for rare species. As previously reviewed in the 2010 CWMP/Single EIR, however, the PRBs would be located in roads and are not anticipated to result in a "Take" of rare species.

The next steps for potential PRB implementation include additional baseline field investigations at the Norseman site in the Nauset Watershed and Mayflower and Lockwood sites in the Pleasant Bay Watershed, as well as final design of the Duck Hole PRB.

Aquaculture and Non-Traditional Technologies

As previously reviewed in NPC2, the Town conducted a successful oyster aquaculture demonstration project in Lonnie's Pond. According to NPC3, the 2022 Lonnie's Pond Annual Report identified an average nitrogen removal rate of approximately 67 kilograms (kg) of nitrogen per year and documented a significant shift in the benthic community from oligochaetes (types of earthworms) to amphipods (types of crustaceans), which is indicative of a healthier ecosystem. Oyster aquaculture in Lonnie's Pond will continue on a long-term basis; however, the Town will not undertake aquaculture at additional sites because other ponds and lakes do not have favorable conditions for aquaculture, such as low levels of boat traffic, shelter from storms, benthic features for oyster growth, and geometry that allows for water quality sampling and evaluation. The Town has decided against implementation of floating constructed wetlands (FCWs) due to their costs, operations and maintenance considerations, and uncertainty about the level of nitrogen removal that could be achieved. The Town also considered using nitrogen reducing biofilters (NRBs) to manage nitrogen at its source; however, no suitable demonstration sites could be identified and NRBs are not believed to be cost-effective.

Stormwater and Fertilizer Management

The Town completed a Stormwater Management Plan Update in 2022 which outlined compliance with its Separate Storm Sewer System (MS4) Permit. Stormwater improvements, including construction of stormwater treatment Best Management Practices (BMPs) on Locust Road and Brewster Cross Road were completed during the sewering of the downtown area to minimize nutrient loadings from stormwater runoff in these areas. Additional BMPs are included in the proposed work for the sewering of the Meetinghouse Pond Area, and structural BMPs that will reduce nutrient loadings to receiving waters have been constructed outside of the sewer project area on Doane Road Landing, Champlain Road Landing, Snow Shore Road Landing, and Portanimicut Road Landing. Two additional structural BMPs are currently in design to treat stormwater runoff from the Herring Brook Way and Cove Road Landing areas.

The Town passed a Nitrogen Control By-law for fertilizer in 2014. As part of its Stormwater Management Plan, the Town has developed and distributed educational materials which describe steps property owners can take to reduce nitrogen runoff, improve their property with native plants, and other

measures to minimize nitrogen impacts to waterways.

Climate Change

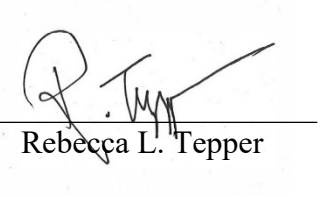
Adaptation and Resiliency

Effective October 1, 2021, all new MEPA projects are required to submit an output report from the MA Climate Resilience Design Standard Tool (Tool) to assess the climate risks of the project. While this NPC is not subject to these requirements, output reports were provided in NPC3 for ten proposed pumping station locations. According to the output reports, all ten locations have "high" exposure ratings for urban flooding associated with extreme precipitation. In addition, three of the pumping stations have High exposure ratings for sea level rise/storm surge and three of them have High exposure ratings for riverine flooding associated with extreme precipitation. According to NPC3, the pumping stations will be designed with flood protection measures designed for the current 500-year storm event. The WWTF is located on high ground where it will not be exposed to sea level rise/storm surge or flood risks. The Town is encouraged to assess the stormwater management upgrades in light of future climate conditions using recommended storm events from the Tool.

Conclusion

The NPC has sufficiently described the nature and general elements of the project for the purposes of MEPA review and described measures to avoid, minimize and mitigate the project's environmental impacts. Comments from Agencies do not request additional MEPA review. Accordingly, I find that an EIR is not required for this project change. According to MassDEP, the Town should consider the ACWMP as having received MassDEP's approval with the issuance of this Certificate.

March 8, 2024
Date



Rebecca L. Tepper

Comments received:

01/11/2024 Natural Heritage and Endangered Species Program (NHESP)
01/11/2024 Cape Cod Commission (CCC)
02/27/2024 Massachusetts Department of Environmental Protection (MassDEP)/Southeast Regional Office (SERO)

RLT/AJS/ajs

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CAPE COD COMMISSION

Via Email
January 11, 2024
Rebecca Tepper, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, Alexander Strysky, MEPA Analyst
100 Cambridge Street, Suite 900, Boston, MA 02114

Re: Notice of Project Change - EEA No. 14414 (CCC File No. 09008/JR09008)
Orleans Amended Comprehensive Wastewater Management Plan

Dear Secretary Tepper:

The Cape Cod Commission is pleased to see the Town of Orleans continuing to advance its plans to manage wastewater and address water quality issues. The Town of Orleans has submitted an Amended Comprehensive Wastewater Management Plan (ACWMP) as a Notice of Project Change, which details updates to the overall project scope and design originally described in the Town of Orleans 2010 Comprehensive Wastewater Management Plan. These updates include a narrowed selection of non-traditional approaches, revised sewer area delineations, and updated implementation timelines.

The ACWMP will be reviewed for consistency with the Cape Cod Area Wide Water Quality Management Plan (208 Plan). A 208 Plan consistency review is the Cape Cod Commission's exclusive means of reviewing municipal wastewater or water quality plans aimed at managing excess nutrient loads in watersheds. Prior to submission for 208 consistency review, Commission staff recommends that the Town add a description of how various plan elements address consistency with the 208 criteria and incorporate additional detail regarding the timing and information needed at major milestones in the adaptive management process.

Thank you for the opportunity to comment on the above-referenced NPC. Commission staff are available to discuss any questions you might have about these comments. Following completion of the MEPA process, Cape Cod Commission staff look forward to working with the town to review the ACWMP for consistency with the 208 Plan.

Sincerely,

Kristy Senatori

Kristy Senatori
Executive Director

COUNTY OF BARNSTABLE • MASSACHUSETTS •

Cc: Project File
Kimberly Newman, Orleans Town Manager, via email
George Meservey, Director of Planning and Community Development, via email
Orleans Cape Cod Commission Representative, via email
Cape Cod Commission Chair, via email
Jennifer Doyle-Breen, AECOM, via email

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January 11, 2024

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
Attention: MEPA Office
Alex Strysky, EEA No. 14414
100 Cambridge Street
Boston, Massachusetts 02114

Project Name:	Orleans Amended Comprehensive Wastewater Management Plan (ACWMP)
Proponent:	Town of Orleans
Location:	Townwide
Project Description:	Orleans Amended Comprehensive Wastewater Management Plan
Document Reviewed:	Notice of Project Change
EEA File Number:	14414
NHESP Tracking No.:	23-10979 (formerly 08-26003)

Dear Secretary Tepper,

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the Division) reviewed the Notice of Project Change (NPC) for the Orleans Amended Comprehensive Wastewater Management Plan (ACWMP) project and would like to offer the following comments.

Projects located within *Priority Habitat* and *Estimated Habitat* according to the *Massachusetts Natural Heritage Atlas* require review by the Division prior to implementation. State-listed species and their habitats are protected pursuant to the Massachusetts Endangered Species Act (M.G.L c. 131A) and its implementing regulations (MESA, 321 CMR 10.00). Rare wetland wildlife habitat is protected in accordance with the rare species provisions of the Massachusetts Wetlands Protection Act (WPA, 310 CMR 10.00). Projects located within Priority Habitat that are not otherwise exempt pursuant to 321 CMR 10.15 require a direct filing with the Division pursuant to the Massachusetts Endangered Species Act (MESA 321 CMR 10.00).

Based on the information contained within the NPC, the ACWMP project components are primarily located outside of areas delineated as Priority Habitat as indicated in the current Massachusetts Natural Heritage Atlas (15th Edition). Additionally, the Division notes that utility installation, such as sewer, located within existing paved roadways are exempt from MESA review (321 CMR 10.14(10)). However, the new proposed Permeable Reactive Barriers (PRBs) identified as Duck Hole, Gosnold, Blossom and Briar Spring, are located within Priority Habitat and appear to require review by the Division pursuant to the MESA.

In advance of a formal filing pursuant to the MESA for any work proposed within Priority Habitat including potential PRB installations specified above, the Division does not currently anticipate

significant state-listed species concerns associated with the PRB project(s). However, these projects may require conditions for the protection of state-listed species. Protection measures may include but are not limited to a time of year restriction to prevent disturbance to state-listed species during the nesting period (June 1 – October 30). The Division anticipates that any state-listed species concerns can be addressed during the MESA review process.

The Division cannot render a final decision until all required MESA filing materials are submitted by the proponent to the Division. As our MESA review is not complete, no alteration to the soil, surface, or vegetation and no work associated with the proposed project shall occur until the Division has made a final determination.

If you have any questions about this letter, please contact Amy Hoenig, Senior Endangered Species Review Biologist at Amy.Hoenig@mass.gov. We appreciate the opportunity to comment on this project.

Sincerely,

Everose Schlüter, Ph.D.
Assistant Director

cc: Jennifer Doyle-Breen, AECOM
Orleans Board of Selectmen
Orleans Conservation Commission
Orleans Planning Department
DEP Southeast Regional Office, MEPA

Commonwealth of Massachusetts
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Maura T. Healey
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Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

February 27, 2024

Rebecca L. Tepper,
Secretary of Energy and Environment
Executive Office of Energy & Environmental Affairs
ATTN: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: NPC Review EOEEA #14414
ORLEANS. Amended Comprehensive Wastewater Management Plan (CWMP)

Dear Secretary, Tepper,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Notice of Project Change (NPC) for the proposed Amended Comprehensive Wastewater Management Plan CWMP, located in Orleans, Massachusetts for the proposed (EOEEA # 14414). The Project Proponent provides the following information for the Project:

This Amended CWMP (ACWMP) builds upon earlier studies and data collection completed for the 2010 CWMP/SEIR and subsequent NPCs and studies. The ACWMP provides an update on the additional planning and engineering efforts that were completed since its approval in 2011 and describes the Town of Orleans' plans to meet water quality and habitat restoration goals. Existing TMDLs and MEP publications were used as a guideline for nitrogen removal targets that will assist in meeting water quality and habitat restoration goals. A combination of sewering, aquaculture, and PRBs is proposed to meet these nitrogen removal goals as described in subsequent sections of this document.

…The material changes to the previously reviewed Project include the following:

- **Revisions to the sewer phase boundaries while substantially maintaining the originally sewered area limits.**
- **Extension of the period to construct wastewater collection facilities in these sewer phases.**
- **Identification of Permeable Reactive Barrier sites for further evaluation and full scale implementation**
- **Elimination of consideration of aquaculture at sites other than Lonnie's Pond**
- **Elimination of consideration of other NT Technologies for nitrogen removal**
- **Preparation of an Amended CWMP (ACWMP) to reflect the changes noted above as well as provide an update on planning and engineering efforts completed since approval of the original CWMP in 2011**

Bureau of Water Resources Comments

Wetlands: Based on the information submitted, it appears that several of the proposed Project components will be located within Wetlands Protection Act jurisdiction; potential impacts to a variety of inland and coastal Areas Subject to Protection, including Salt Marsh, can be anticipated. Therefore, WPA Notices of Intent or/and Requests for Determination of Applicability will need to be submitted to the Orleans Conservation Commission prior to any temporary or permanent alterations [except for planning and design activities that meet the provisions of the minor activity exemption at 310 CMR 10.02(2)(b)1.g.].

This municipal Project is subject to MassDEP's Stormwater Management Standards as a whole, although not all of the individual standards will apply to all components of the work. Notices of Intent and WQC applications should include Stormwater Reports.

Any proposed shellfish aquaculture should be reviewed by the Division of Marine Fisheries prior to the submittal of a Notice of Intent.

Waterways: Based on the information contained in the NPC, there does not appear to be any proposed work within Waterways jurisdiction. If any future work is proposed within an area subject to Waterways jurisdiction (filled or flowed tidelands, Great Ponds, and navigable rivers or streams), the Project Proponent shall contact the Waterways Program to determine if Chapter 91 authorization is required.

NPDES Construction General Stormwater Permit: The Project Proponent acknowledges that its activities will require filing a Notice of Intent (NOI) with the United States Environmental Protection Agency (US EPA). Access to information regarding the NPDES Stormwater requirements and an application for the Construction General Permit is obtained by completing and submitting a Notice of Intent (NOI) to EPA via the Stormwater Discharges from Construction Activities | National Pollutant Discharge Elimination System (NPDES) | US EPA..

The Proponent is advised to consult with Margarita Chatterton at Chatterton.Margarita@epa.gov or by phone at 601-918-1034 for questions regarding EPA's NPDES Construction General Permit requirements.

In addition, the Proponent is reminded that local Planning Boards (and/or other local authorities) may require stormwater controls beyond that of the Wetlands protection Act. These controls are usually created to keep stormwater onsite so as not to create nuisance conditions offsite.

Underground Injection Control: The Department acknowledges the Town's plan to submit MassDEP Underground Injection Control Registration Permit Application (Form BRP WS 06). All information regarding on-line (eDEP) UIC registration applications may be obtained at the following web page under the category "Applications & Forms": https://www.mass.gov/underground-injection-control-uic. For further information please contact Joe Cerutti, the statewide UIC program contact, who can be reached at joseph.cerutti@mass.gov.

Wastewater Management: MassDEP's Southeast Regional Office is pleased to have the opportunity to comment on the Town of Orleans's Notice of Project Change to their Amended Comprehensive Wastewater Management Plan (ACWMP). MassDEP commends the Town on its efforts to be stewards of environmental protection.

Introduction

In the 2010 CWMP/SEIR, the Town of Orleans described a 20-year phased construction plan of a wastewater collection system, a new wastewater treatment facility (WWTF), and implementation of non-structural program elements. The goal was to achieve reductions in nitrogen loadings to coastal embayments. Since the Comprehensive Wastewater Management Plan (CWMP) was first approved in 2011, additional studies, wastewater engineering, and planning decisions have been made.

In October 2018, a Notice of Project Change (NPC) was submitted to MEPA to modify the effluent discharge location and technology. A MEPA Certificate was issued approving the new discharge location at 32/43 Lots Hollow Road via wick wells. The current 2023 NPC addresses revisions to the sewer phase boundaries while maintaining the originally sewered area limits. The current NPC extends the sewer expansion timeline, identifies Permeable Reactive Barrier (PRB) sites for further evaluation and full-scale implementation. The presently submitted NPC also eliminates consideration of aquaculture at sites other than Lonnie's Pond and eliminates consideration of other Alternative Technologies for nitrogen removal. The implementation schedule was extended with an increase from 6 to 16 phases with future phases extended through 2067. The following is a summary of the most recent phases of the Orleans CWMP:

- Phase 1: The 2010 CWMP identified the need for a sewer collection system throughout a significant portion of the Town, a new wastewater treatment facility, and an effluent disposal site. The construction of the new 350,000 gallons per day (gpd) WWTF began in 2020 and was completed in March 2023.
- Phase 2: Phase 2 is ongoing and consists of the construction of a combination of gravity sewers and low-pressure sewers (LPS) to service the Meetinghouse Pond Area. The Phase 2 Area services 458 properties: 90% are residential and 10% are non-residential/mixed-use properties.
- Phase 3: Phase 3 is currently in the study phase, with future phases extended through 2067.

Orleans Pleasant Bay Watershed Total Maximum Daily Load (TMDL) Compliance

The Town of Orleans collaborates with the Towns of Brewster, Chatham, and Harwich to comply with the TMDL. In 2018, the Pleasant Bay Alliance (PBA) applied for and received a Watershed Permit from MassDEP to address nitrogen impairment within Pleasant Bay. This permit is the first of its kind and requires the four watershed towns (Brewster, Chatham, Harwich, and Orleans) to work collaboratively under the 2018 Pleasant Bay Targeted Watershed Management Plan (TWMP) to address excessive inputs of nitrogen into receiving waters and reach TMDL compliance.

The most recent PBA Annual Report documents that Orleans has achieved 60% of its nitrogen removal target for 2023, and that overall, the four towns have achieved 91% of the 2023 goals. The 2023 PBA report notes that Orleans nitrogen reductions to date have been accomplished through its residential fertilizer control ordinance and Lonnie's Pond aquaculture. The report describes the Phase 2 Meetinghouse Pond sewering plan and upcoming Phase 3 Lakes and Pond sewering plan which is estimated to remove over 2,000 kg/yr of nitrogen removal.

Although the extension of sewer phases into the future will delay some nitrogen removal, Phases 1 (construction completed), 2 (construction underway) and 3 (sewer study underway) are anticipated to remove approximately 42% of the Pleasant Bay nitrogen reduction goal identified in the current TMDL, assuming a removal rate of 4 kg/year of nitrogen per parcel. The ongoing aquaculture project at Lonnie's Pond is removing additional nitrogen from Pleasant Bay, and the Town's overall approach is in compliance with the Pleasant Bay Watershed Permit. The first three sewer phases of the CWMP are similarly anticipated to remove approximately 35% of the nitrogen removal goals identified in the 2012 Nauset Harbor Massachusetts Estuaries Program (MEP) Report, and 100% of the nitrogen removal goals identified in the 2008 Rock Harbor MEP report.

Although TMDLs have yet to be established for Nauset and Rock Harbor, MassDEP recommends using the suggested nitrogen reductions determined by MEP for preliminary planning. On June 8, 2023, the towns of Orleans and Eastham executed a Memorandum of Understanding (MOU) with the purpose of coordination between the towns in pursing joint Watershed Management Permits through MassDEP. The towns have agreed to work cooperatively to investigate nutrient management solutions for the Rock Harbor and Nauset Harbor Embayment Systems. MassDEP understands that the Town, in collaboration with the Pleasant Bay Alliance, are evaluating the necessary nitrogen reduction goals considering model and land use load refinement and believes the town to be in compliance with its permit requirements. MassDEP acknowledges that a better understanding of nitrogen removal goals presented in both Nauset Harbor and Rock Harbor MEP reports may be required. MassDEP recommends an implementation and embayment monitoring program approach for both watersheds. The town should consider a watershed permit application (WP95) for both Rock Harbor and Nauset Harbor as a tool to collaborate with MassDEP on nitrogen reduction tracking, review of embayment monitoring data, and guidance on any needed model refinements of the respective MEP models.

Alternative Strategies and Demonstration Projects

The Town of Orleans CWMP employs a mix of conventional and alternative nitrogen abatement strategies in order to achieve nitrogen reductions. The alternative strategies include aquaculture, permeable reactive barriers, and nitrogen reduction credits from local fertilizer bylaw compliance. In March 2019, a second NPC indicated that the Town had implemented demonstration projects for aquaculture and permeable reactive barriers (PRBs) to assess the potential of these Non-Traditional Technologies (NTs) to remove nitrogen.

Shellfish Aquaculture

The 2018 Pleasant Bay Watershed Permit and associated Targeted Watershed Management Plan (TWMP) identified the Lonnie's Pond aquaculture project as one of the Town of Orleans' components for removing nitrogen.

The 2019 NPC provided monitoring results for the demonstration project in Lonnie's Pond. Oyster culture was deployed in floating bags, attached to long-lines, and anchored by a series of telescoping augurs. Data indicated that nitrogen content in Year 1 and Year 2 oysters was 10.5% and 10.3% respectively (25.9 kg of Nitrogen was removed in 2016 and 28.1 kg of Nitrogen in 2017). Since 2018, Nitrogen removal from an aquaculture deployment of approximately 0.37 acre has ranged between approximately 51 and 84 kg N/year, resulting in an average removal of approximately 64 kilograms of nitrogen each year (kg N/yr) over this time period. In the last three years of implantation, aquaculture has removed an average of approximately 67 kg N/yr. The 2022 Lonnie's

Pond Annual Report prepared by SMAST determined that in recent years there has been a significant shift in the benthic community from oligochaetes (various types of earthworms) to amphipods (various types of crustaceans). MassDEP acknowledges this is indicative of a healthier ecosystem with lessening impairment and is a sign of the progress stimulated from nitrogen removal. Within the watershed permit, the Town may request for modification of monitoring as established in the Quality Assurance Project Plan (QAPP). This request can be submitted through a formal letter with the proposed new QAPP requesting for approval with suggested changes and justification for those changes.

Permeable Reactive Barriers

In 2016, a PRB demonstration project had been implemented at Eldredge Park. The PRB is located within Eldredge Park at 78 Eldredge Park Way in Orleans. The 100-foot (ft) long PRB is oriented northwest to southeast, perpendicular to the northeasterly groundwater flow direction. Physical structures associated with the PRB include 42 two-inch diameter monitoring wells which are flush mounted and occupy less than 1 square foot (sf). Groundwater generally flows toward Town Cove which is located approximately 2,400 ft to the northeast. Pilot PRB performance demonstrated that the PRB was effective at reducing significant nitrate concentrations, up to 39 mg/L in upgradient groundwater, to low concentrations or to below the detection limits of 0.03 mg/L immediately downgradient of the PRB. Based on data collected in 2021, Eldredge Parkway Demonstration PRB achieves a greater than 80% nitrogen removal efficiency.

In the 2023 NPC, full scale PRB's were described. The Duck Hole, Mayflower, and Lockwood sites were chosen for further consideration and Norseman and Nauset were identified to need further investigation. After site investigations at Duck Hole, six monitoring well locations at three elevations at each location were identified. The lithological and groundwater chemistry conditions make this suitable for PRB installation. According to the Town, with a PRB length of 4,100 ft and a vertical extent of 83 ft the potential range of nitrogen flux is from 492 to 2,228 kg/yr. Assuming an 80% reduction in nitrate flux based on PRB performance, nitrate load removal may be between 394 kg/yr and 1,782 kg/yr. Mayflower and Lockwood in the Pleasant Bay watershed were selected for further consideration based on their location relative to groundwater flows and their position in the watershed, which maximizes potential for intercepting and treating nitrogen in the groundwater. No Rock Harbor sites were chosen for further investigation. According to the Town, the estimated PRB efficiency considering all locations ranged from 0.09 to 0.40 Kg/LF/yr and the addition of PRB sites will not generate further impacts to protected areas or exceed any MEPA review thresholds. The Mayflower and the Lockwood PRB sites are located within the Pleasant Bay ACEC and the Duck Hole PRB site is located partially within the Pleasant Bay ACEC and partially within an area mapped as a Natural Heritage and Endangered Species Program (NHESP) Estimated and Priority Habitat. However, work in these resource areas was anticipated at the time of the 2010 CWMP, and the PRBs would be located in roads, and therefore are not anticipated to result in a "Take" of protected species. MassDEP suggests consultation with NHESP once design of the PRBs progresses to further evaluate potential impacted species and habitat.

Fertilizer Management

In 2014, the Town of Orleans passed a Nitrogen Control By-law for fertilizer. As part of the 2019 Stormwater Management Plan, the Town developed a plan to implement an education system. Since the 2019 Plan, the Town has developed and distributed specific messages in educational materials in many forms including: flyers, brochures, pamphlets, and website updates regarding proper

fertilizer, herbicide, and pesticide use. The educational materials describe steps property owners can take to reduce nitrogen runoff and improve their property with native plants, among other things. MassDEP recommends that the Town continue to educate to the best of its ability fertilizer control to maximize nitrogen reductions.

Stormwater Management

In 2022, the Town completed a Stormwater Management Plan Update which outlined compliance with the US EPA/MassDEP 2018 Massachusetts Separate Storm Sewer System (MS4) Permit (Town of Orleans, 2017). The Phase 1 Downtown Area sewer project has been completed and included updates to the Town's stormwater system and stormwater Best Management Practices (BMPs). The stormwater management improvements included in Phase 1 are structural stormwater treatment BMPs on Locust Road and Brewster Cross Road. Stormwater management improvements included in the Phase 2 Meetinghouse Pond Area are structural stormwater treatment BMPs on Monument Road and Pond Road. Additional structural BMPs have been constructed outside of the sewer project area on Doane Road Landing, Champlain Road Landing, Snow Shore Road Landing, and Portanimicut Road Landing. Two additional structural BMPs are currently in design to treat stormwater runoff from Herring Brook Way and Cove Road Landing. MassDEP recommends that the Town continue to employ BMPs where feasible to maximize the possible assumed nitrogen reductions from stormwater best management practices.

Wastewater Collection and Treatment

The Town of Orleans 2023 NPC proposed updated sewer service boundaries focusing on the 2010 CWMP identified "Core" sewer service area. In the 2010 CWMP, an "extended" area included the potential to extend sewers throughout all of the Town of Orleans. The currently proposed extent of sewering conforms to the original "Core" area. The wastewater treatment facility's capacity was determined based on water usage records for developed areas, with allowances for future growth and variations in water usage. The design capacity is set at 700,000 gallons per day (gpd), exceeding predicted flows to accommodate future development and usage fluctuations. According to the Town, the current 350,000 average daily flow gpd facility can be doubled operationally. Compared to the 2010 plan, the proposed approach includes fewer pump stations (14 instead of over 50) and shorter sewer pipe lengths (48.5 miles instead of 74.9 miles), favoring gravity sewers over low-pressure sewers.

Wastewater Collection System

The WWTF consists of about 15,750 LF of 8-inch through 18-inch PVC Gravity Sewers, about 7,500 LF of PVC Force Main, about 20,750 LF of 1.5-inch through 3-inch Low Pressure Sewers, and one (1) Submersible Pumping Station. The Downtown Area consists of about 30,690 linear feet (LF) of 8-inch through 18-inch PVC Gravity Sewers, about 9,270 LF of 6-inch and 8-inch PVC and HDPE Force Mains, about 2,030 LF of 2-inch Low Pressure Sewers, and three (3) Submersible Pumping Stations. The Meetinghouse Pond Area consists of about 15,750 LF of 8-inch through 18-inch PVC Gravity Sewers, about 7,500 LF of 8-inch PVC Force Main, about 20,750 LF of 1.5-inch through 3-inch Low Pressure Sewers, and (1) Submersible Pumping Station. Modifications to the collection system forcemain or gravity sewer or the continuation of sewer extensions do not require a WP68 application submittal for plan approval; however, pump station designs that have not been already reviewed by MassDEP SERO BWR Wastewater will require a WP68 application submittal for plan approval. The review of WP68 applications by MassDEP SERO BWR Wastewater are independent of clean water state revolving fund (CWSRF) applications and submittals.

Wastewater Treatment

Wastewater is treated with sequencing batch reactors, disc filters, equalization tanks and an ultraviolet disinfection unit. The Town anticipates starting planning for an expanded facility in the early 2030s though duplication of the treatment trains. The new expanded facility is expected to come online in the late 2030s or early 2040s. The Town should coordinate with MassDEP when facility upgrades are needed through a WP68 treatment works plan approval or WP11 permit modification with plan approval.

Wastewater Disposal

Treated effluent is discharged below ground via wick wells. Five wicks have been installed at 32 Lots Hollow Road in Orleans which is the primary discharge location for the WWTF. The Town states that the existing wick wells are sufficient through approximately 500,000 gpd discharge flow, which is predicted to be exceeded after Phase 12 in approximately 2055, at which time additional discharge locations will be needed. Coordination with MassDEP is needed before average daily flow volume for Phase 2 is discharged.

The groundwater discharge permit establishes average annual flows and max daily flows for phases one and two. According to the groundwater discharge permit, prior to discharging phase two flows, the Town of Orleans must evaluate the operational experience with the wicks to determine if the wicks at 32 Lots Hallow Road are capable of accommodating the max day flow. Pending on the results of that evaluation, the Department reserves the right to require development of additional wicks with plans to be submitted by the Permittee through a BRP WP68 treatment works plan approval without permit modification. New sites that have not already been investigated will require WP83 hydrogeological review in addition to the WP68 application. The current permit allows for 595,100 gpd max day discharge flow for Phase 1 and 228,900 gpd annual average discharge flow. Please provide clarity on how or if the flow outline within the permit is impacted by the presently submitted WP68. Additionally, please clarify in the CWMP where flow volumes are discussed whether the volume is referring to maximum daily flows, average daily flows, or average annual flows.

Namskaket Creek Discharge

An application to modify the design of the wick discharge for the Orleans Wastewater Treatment facility was submitted to MassDEP on June 14, 2021. This was to address concerns about potential impacts on marshes. MassDEP approved the modification on September 27, 2021. Prior to discharge, species monitoring was recommended to track any changes. The salt marsh monitoring program focuses on Namskaket Creek's eastern/southeastern portion, aiming to observe plant species distribution before and after discharge. The 2023 monitoring results revealed that natural processes, like wrack deposition and removal influenced by tidal flow and coastal storms, affect vegetative species distribution. The results indicated that despite increased wrack coverage in 2023, the total coverage of native salt marsh species remained stable between 2022 and 2023 with a slight decrease in Phragmites coverage. MassDEP suggests the Town continue to monitor Namskaket Creek for potential impacts to the marsh and to generate enough data to distinguish natural changes in the environment, potential impacts from climate change, and any impact from the wick wells.

Conclusion

The NPC report presents a step forward for the Town of Orleans. MassDEP commends Orleans's effort to make great strides towards the nitrogen reduction targets. Acknowledgement and planning around projected growth will assure that the plan not only addresses current needs but future needs as well to meet the embayments nitrogen reduction targets. Notwithstanding unpredicted changes in land use and considering the use of "present day loads" per the MEP and TMDL, the Town may achieve the estimated removal requirements and meet concentrations at the sentinel stations. The document contains a well-planned approach to wastewater management planning.

Bureau of Waste Site Cleanup (BWSC)

Based upon the information provided, the Bureau of Waste Site Cleanup (BWSC) searched its databases for disposal sites and release notifications that have occurred at or might impact the proposed Project area. A disposal site is a location where there has been a release to the environment of Oil and/or Hazardous Material (OHM) that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000]The Project described in the 2010 CWMP/SEIR included a 20-year phased construction of a wastewater collection system, a new Wastewater Treatment Facility, and implementation of non-structural program elements to achieve reductions in nitrogen loadings to coastal embayments. The Notice of Project Change includes updated sewer service boundaries, the schedule for implementation has been extended, and full-scale Permeable Reactive Barriers.

There are no listed MCP disposal sites in the vicinity of the permeable reactive barriers that would appear to impact the proposed Project. Please be advised that there are many listed BWSC disposal sites located within and near the overall proposed Project area. Many of the disposal sites have been closed under the MCP, but other disposal sites are open and require continued response actions under the MCP. A listing and discussion of each MCP site will not be presented here. The Proponent is advised that if OHM is encountered during the installation of the sewer mains or permeable reactive barriers that addressing contamination might be accomplished using the Utility Related Abatement Measures provisions at 310 CMR 40.0461 through 40.0469.

Interested parties may view a map showing the location of BWSC disposal sites using the MassGIS data viewer at MassMapper. Under the Available Data Layers listed on the right sidebar, select "Regulated Areas", and then "DEP Tier Classified 21E Sites". MCP reports and the compliance status of specific disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: https://eeaonline.eea.state.ma.us/portal#!/search/wastesite.

The Project Proponent is advised that if OHM is identified during the implementation of this Project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to MassDEP, if necessary. A Licensed Site Professional (LSP) should be retained to determine if notification is required and, if need be, to render appropriate opinions. The LSP may evaluate whether risk reduction measures are necessary if contamination is present. The BWSC may be contacted for guidance if questions arise regarding cleanup.

Spills Prevention and Control: A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential on-site activity releases.

Bureau of Air and Waste (BAW) Comments

***Air Quality*:** Construction and operation activities shall not cause or contribute to a condition of air pollution due to dust, odor or noise. To determine the appropriate requirements please refer to:

310 CMR 7.09 Dust, Odor, Construction, and Demolition
310 CMR 7.10 Noise

Construction-Related Measures.

The Project Proponent confirms that its contractor is required to "follow the MA Diesel Retrofit Program. All non-road engines are required to operate using only ultra-low sulfur diesel fuel (ULSD) with a sulfur content less than or equal to 15 ppm pursuant to 40 CFR 80.510.Generators installed to date have met all applicable requirements.

MassDEP requests if a piece of equipment is not available in the Tier 4 configuration, then the Proponent should use construction equipment that has been retrofitted with the best available after-engine emission control technology, such as oxidation catalysts or diesel particulate filters, to reduce exhaust emissions. The Proponent should provide a list of the engines, their emission tiers, and, if applicable, the best available control technology installed on each piece in the subsequent environmental filing.

Massachusetts Idling Regulation.

The Project Proponent reports that its "contractors in future phases will be required to limit unnecessary idling."

MassDEP requests that the Proponent state specifically in the subsequent environmental filing how it plans to prohibit the excessive idling during the construction period. Typical methods of reducing idling include driver training, periodic inspections by site supervisors, and posting signage. In addition, to ensure compliance with this regulation once the Project is occupied, MassDEP requests that the Proponent establish permanent signage limiting idling to five minutes or less at the completed Project.

Solid Waste Management: The Project Proponent reports its responsibility for disposing waste, as follows:

- Demonstration Test field activities are anticipated to generate wastes requiring disposal, including purge water from monitoring well sampling, soil cuttings from well installation, and other wastes generated by PRB installation activities.
- Well installation may generate soil cuttings. These cuttings will be placed into 55-gallon drums or a roll-off container. Each container will be labeled with the date of soil collection and the well

bore hole where the cuttings were collected from. Soil samples will be collected for waste characterization, following which the soil will be disposed of at an approved disposal facility.

- PRB Demonstration Test derived waste may consist of empty totes, empty bags, pallets, personal protective equipment, and miscellaneous trash. The empty totes/drums will be shipped back to the EVO manufacturer for re-use if possible. Other Demonstration Test derived waste can be disposed of as municipal trash.

As stated in the BWSC comments, the area of the proposed PRB installation is not known to be contaminated with OHM. The Proponent should use best professional judgement to determine if the area may be contaminated with OHM including the history of the area and evidence in the augur cuttings and purge water to determine the appropriate analysis and proper disposal methods for environmental media generated during the installation and sampling of wells in the PRB area. If no OHM is encountered or suspected in the water or soils, the water may be infiltrated into the nearby ground or disposed into the municipal stormwater system and the soils may be used as general unrestricted fill.

The Project Proponent is advised of its requirements for solid waste disposal:

1. Clean Wood: As defined in 310 CMR 16.02, clean wood means "discarded material consisting of trees, stumps and brush, including but limited to sawdust, chips, shavings, bark, and new or used lumber" …etc. Clean wood does not include wood from commingled construction and demolition waste, engineered wood products, and wood containing or likely to contain asbestos, chemical preservatives, or paints, stains or other coatings, or adhesives. The Solid Waste section would like to note to the Proponent the following: wood is not allowed to be buried or disposed of at the Site pursuant to 310 CMR 16.00 & 310 CMR 19.000 unless otherwise approved by MassDEP. Clean wood may be handled in accordance with 310 CMR 16.03(2)(c)7 which allows for the on-site processing (i.e., chipping) of wood for use at the Site (i.e., use as landscaping material) and/or the wood to be transported to a permitted facility (i.e., wood waste reclamation facility) or other facility that is permitted to accept and process wood.

2. *Compliance with Waste Ban Regulations:* Waste materials discovered or generated during construction that are determined to be solid waste (e.g., construction and demolition waste, clean gypsum wallboard) and/or recyclable material (e.g., metal, asphalt, brick, and concrete) shall be disposed, recycled, and/or otherwise handled in accordance with the Solid Waste Regulations including 310 CMR 19.017*: Waste Bans*. Waste Ban regulations prohibit the disposal, transfer for disposal, or contracting for disposal of certain hazardous, recyclable, or compostable items at solid waste facilities in Massachusetts, including, but not limited to, metal, wood, asphalt pavement, brick, concrete, and clean gypsum wallboard. The goals of the waste bans are to: promote reuse, waste reduction, or recycling; reduce the adverse impacts of solid waste management on the environment; conserve capacity at existing solid waste disposal facilities; minimize the need for construction of new solid waste disposal facilities; and support the recycling industry by ensuring that large volumes of material are available on a consistent basis. Further guidance can be found at: https://www.mass.gov/guides/massdep-waste-disposal-bans.

3. *Asphalt, brick, and concrete (ABC) rubble,* such as the rubble generated during dredging must be handled in accordance with the Solid Waste regulations. These regulations allow, and MassDEP encourages, the recycling/reuse of ABC rubble. The Proponent should refer to MassDEP's Information Sheet, entitled *"Using or Processing Asphalt Pavement, Brick and*

Concrete Rubble, Updated February 27, 2017", that answers commonly asked questions about ABC rubble and identifies the provisions of the solid waste regulations that pertain to recycling/reusing ABC rubble. This policy can be found on-line at the MassDEP website: https://www.mass.gov/files/documents/2018/03/19/abc-rubble.pdf.

If you have any questions regarding the Solid Waste Management Program comments above, please contact Jennifer Wharff at Jennifer.Wharff@mass.gov or Mark Dakers at Mark.Dakers@mass.gov.

MassDEP Support of Insignificance

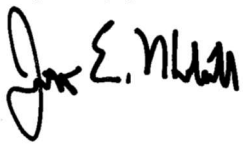
MassDEP supports the Proponent's request that the NPC be considered insignificant, and that the Secretary's Certificate not contain a scope for an Environmental Impact Report (EIR). If so agreed, the Department would then consider the Secretary's Certificate the equivalent to a MassDEP approval of the CWMP.

Proposed s.61 Findings

The "Certificate of the Secretary of Energy and Environmental Affairs on the Notice of Project Change" may indicate that this Project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR 11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the Project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

The MassDEP Southeast Regional Office appreciates the opportunity to comment on this proposed Project. If you have any questions regarding these comments, please contact George Zoto at George.Zoto@mass.gov or Jonathan Hobill at Jonathan.Hobill@mass.gov.

Very truly yours,



Jonathan E. Hobill,
Regional Engineer
Bureau of Water Resources,

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
Gerard Martin, Deputy Regional Director, BWR

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