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December 16, 2024

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Straightway and Hyannisport Water Treatment Facilities Improvement Project
PROJECT MUNICIPALITY	: Barnstable
PROJECT WATERSHED	: Cape Cod
EEA NUMBER	: 16875
PROJECT PROPONENT	: Town of Barnstable
DATE NOTICED IN MONITOR	: November 8, 2024

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.06 of the MEPA Regulations (301 CMR 11.00), I have reviewed the Final Environmental Impact Report (FEIR) and hereby determine that it adequately and properly complies with MEPA and its implementing regulations. As noted in my Certificate on the Expanded Environmental Notification Form (EENF) and Proposed EIR (EENF/Proposed EIR) issued on November 1, 2024, the Proposed EIR was published for review as a FEIR pursuant to Section 11.06(14)(a) of the MEPA regulations. It was subject to a 30-day public comment period during which time one comment letter from the Massachusetts Department of Environmental Protection (MassDEP) was received; however, the letter stated that its intent was to emphasize the comments submitted on the EENF/Proposed EIR and not to raise any additional concerns.

Project Description

As described in the FEIR, the project consists of the construction of water treatment improvements to the Town of Barnstable's Hyannis Water System (HWS). The HWS consists of three drinking water treatment subsystems, known as the Straightway/Hyannisport, Mary Dunn, and Maher and complexes, with a combined permitted withdrawal capacity of approximately 10.8 million gallons

per day (mgd). All 12 of the wells supplying water to the HWS are impacted by per- and polyfluoroalkyl substances (PFAS) and require treatment using granular activated carbon (GAC) filtration units to lower concentrations of PFAS to meet limits established by the Massachusetts Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (EPA). The HWS initiated treatment of PFAS in 2016 when the EPA's PFAS Health Advisory limit was lowered to 70 nanograms per liter (ng/L). Since 2016, summertime water demand has continued to increase; PFAS limits have become stricter; and the treatment and pumping capacity of the HWS has decreased due lower well production and an insufficient number of GAC units. In addition, the GACs were initially installed outdoors ("unwinterized") and could not be used in the wintertime. Improvements were completed at the Mahar treatment complex within the last few years to address 1,4- dioxane and winterize the GACs so that the facility can provide year-round treatment. The Mary Dunne complex provides treatment of PFAS, but the GACs are not yet winterized. The HWS intends to enclose the GACs and construct other treatment and pumping upgrades at the Mary Dunne complex after the Straightway/Hyannisport complex treatment improvements described herein are commenced; the Town should consult with the MEPA Office regarding any MEPA review that may be required for the planned Mary Dunne improvements. Because not all of the HWS treatment complexes can treat PFAS year- round, the system is strained to meet water demand in the winter.

The Straightway/Hyannisport treatment complex consists of two connected water supply and treatment facilities (Straightway and Hyannisport). The Straightway site includes two wells, known as Straightway 1 and Straightway 2, and the Hyannisport site includes two wells known as the Hyannisport and Simmons Pond Wells. The four wells in the Straightway/Hyannisport complex have a combined a permitted water withdrawal capacity of 4.03 mgd. However, the complex can currently provide only 2.16 mgd because one of the wells (Straightway 2) has been taken off-line due to water quality concerns, and the Hyannisport and Simmons Pond Wells have become plugged due to an accumulation of iron and managanese and are producing at 80% or less of their permitted withdrawal capacity. In addition, all four wells have PFAS levels that exceed current Massachusetts Maximum Contaminant Level (MMCL) of 20 ng/L but are treated for PFAS by the existing unwinterized GACs at the Straightway site; therefore, the wells must be taken off-line during the winter. According to the FEIR, levels of iron, manganese, and 1,4-dioxane require treatment as they exceed the EPA's Secondary Maximum Contaminant Levels (SMCLs), the MMCLs, or the limits established by MassDEP's Office of Research and Standards (ORS). Finally, the existing booster pump station is undersized and must be replaced in order to pump the full 4.03 mgd that can be produced by the wells from the treatment facility to the distribution system. To address these issues, the Town has proposed the following improvements to the Straightway/Hyannisport complex, which are described in the FEIR:

- A new 10,660-sf water treatment plant (WTP) will be constructed at the Straightway site with greensand pre-treatment filters that will remove manganese and iron, an ultraviolet-advanced oxidation process (UV-AOP) to remove 1,4-dioxane, and four additional GAC units to remove PFAS; in addition, the facility will consolidate chemical treatment for pH, chlorination, and corrosion control that currently occurs in the Hyannisport Treatment Facility and Straightway Treatment Facility, both of which will be decommissioned
- In addition to the four new GAC filtration units to be included in the new WTP, the capacity to treat PFAS will be increased by winterizing the four existing GACs at the Straightway site by constructing a new building to house them so they can operate throughout the year
- Yields from the Hyannisport and Simmons Pond wells will be increased by replacing the

existing wells, which are plugged by iron and manganese, with new wells
- Straightway Well 2, which is offline due to water quality concerns, will be reactivated with the proposed treatment improvements described below
- The Hyannisport and Straightway wells, which are within the 500-year floodplain, will be replaced with new wells that are at higher elevations
- The existing booster pump station at the Straightway site, which has a capacity of 1,500 gallons per minutes (gpm), or approximately 2.16 million gallons per day (mgd), will be replaced with a booster pump station with a capacity of 3,000 gpm (approximately 4.3 mgd) and the pumps at all four wells will be upgraded

Project Site

The Straightway/Hyannisport treatment complex is located on Town-owned land consisting of parcels totaling approximately 48 acres in southeastern Barnstable. Outside of areas used for water treatment purposes, the 48-acre site is primarily forested, and includes Ben's Pond at the northern end and Simmons Pond at the southern end. The Straightway and Hyannisport sites are connected by a gravel road through the Town-owned land. Residential neighborhoods surround the 48-acre site on all sides. The 48-acre site is protected for water supply purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth.

The Straightway/Hyannisport complex is located within an Environmental Justice (EJ) population designated as Minority and English Isolation, and within one mile of three EJ populations designated as Minority and four EJ populations designated as Minority and Income. The complex is located within five miles of 10 additional EJ populations, including five designated as Minority, two designated as Income, two designated as Minority and Income, and one designated as Minority, Income, and English Isolation.

Straightway Treatment Site

The Straightway site is located within a fenced area adjacent to the 4.97-acre Ben's Pond in the northern part of the Town-owned land. The site consists of the existing Straightway Treatment Facility, Straightway Wells No. 1 and No. 2 (both of which are located within the existing treatment facility building), a 400-gallon above-ground water storage tank, a backwash lagoon basin, four GAC units, a booster pumping station, and a chlorination building. The treatment site also includes driveways, parking areas, and lawn and landscaped areas adjacent to buildings. Access to the Straightway site is provided through a gated entrance from Straightway (a Town-owned street). The fenced area is surrounded by trees on all sides. Bordering Vegetated Wetlands (BVW) associated with Ben's Pond are located north and east of the Straightway site. The Straightway complex is partially within the 100-ft Buffer Zone of Ben's Pond and the BVW. The 400-ft Zone 1 groundwater supply protection zone includes the entire fenced area and adjacent areas of Ben's Pond and forested land.

Hyannisport Treatment Site

The Hyannisport site is located approximately 1,700 ft (0.3 miles) south of the Straightway site adjacent at the southern end of the 48-acre Town-owned parcel and east of the 8.4-acre Simmons Pond. It consists of the existing Hyannisport Water Treatment Facility; the Hyannisport Well, which is located

within the treatment facility building; and the Simmons Pond Well, which is located in an existing pump station building. Water from the Hyannisport treatment complex is pumped to the Straightway site via a 1,700-ft long water main through the 48-acre Town-owned site. The Hyannisport site is partially enclosed by a fence. It is bordered to the north and west by Town-owned forested land, to the east by Simmons Pond and associated wetlands (BVW), and to the south by Smith Street. The existing Simmons Pond pump station and the existing treatment facility are within the 100 ft Buffer Zone of BVW. The existing treatment facility is located within the 100-ft Riverfront Area of Halls Creek, which is located to the southwest of the site. According to the Federal Emergency Management Agency National Flood Hazard Layer, the Hyannisport Treatment Facility/Hyannisport Well and the Simmons Pond Pump Station/Simmons Pond Well are in a 500-year (0.2% annual chance) floodplain, but outside of the 100-year floodplain.

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include alteration of 2.19 acres of land, including 1.42 acres of tree clearing; creation of 47,674 sf (1.1 acres) of impervious area; and alteration of approximately 24,752 sf (0.57 acres) of Riverfront Area, of which 3,227 sf (0.07 acres) will be permanently impacted.

The purpose of the project is to provide safe drinking water by reducing levels of PFAS, 1,4-dioxane, manganese, and iron from the four wells in the Straightway and Hyannisport complexes. Measures to avoid, minimize, and mitigate environmental impacts include construction of a new stormwater management system, the use of erosion and sedimentation controls during project construction, the restoration of temporarily disturbed areas, including Riverfront Area, following construction, the use of all-electric heating and cooling systems in proposed buildings, and provision of an electric vehicle (EV) charging station that can serve two vehicles.

Jurisdiction and Permitting

This project is subject to MEPA review because it requires an Agency Action and meets/exceeds the thresholds at 301 CMR 11.03(4)(b)(4) (Construction of a New drinking water treatment plant with a Capacity of 1,000,000 or more gpd) and 301 CMR 11.03(3)(b)(1)(f) (alteration of ½ or more acres of any other wetlands (Riverfront Area))[1]. The project requires the preparation of an EIR pursuant to 301 CMR 11.06(7)(b) because it is located within a DGA (1 mile) around one or more EJ Populations. The project will require BRP-WS 20 (Approval to Construct a Source 70 gpm or greater (for Replacement Wells)), BRP-WS25 (Approval of Treatment Facility Modification), and BRP-WS29 (Chemical Addition Retrofit of Water System Serving >3,300 People) permits from MassDEP.

The project requires one or more Orders of Conditions from the Barnstable Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP),

[1] The FEIR listed the applicable threshold as 301 CMR 11.03(4)(b)(5), expansion of an existing drinking water treatment plant by the greater of 1,000,000 or more gpd, or 10% of existing capacity because MassDEP has advised the Town to apply for an approval to modify the existing treatment processes at the Straightway/Hyannisport complex. However, the project involves construction of a new water treatment plant as specified in the MEPA review threshold at 301 CMR11.03(4)(b)(4). Both thresholds are ENF-level thresholds and the scope of MEPA review is essentially the same.

Development of Regional Impact (DRI) review by the Cape Cod Commission, and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the EPA.

The project is seeking Financial Assistance from the State Revolving Fund (SRF) Drinking Water Program, administered by MassDEP and other agencies. Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the FEIR

The FEIR included a project description, an alternatives analysis, plans of existing and proposed conditions, and identification of measures to avoid, minimize and mitigate environmental impacts. Consistent with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency, the FEIR contained an output report from the Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "MA Resilience Design Standards Tool"),[2] together with information on climate resilience strategies to be undertaken by the project. On September 18, 2024, the Town distributed revised estimates of wetlands impacts to the MEPA Office and entities on the FEIR distribution list. For purposes of clarity, all supplemental materials provided by the Town are included in references to the "FEIR," unless otherwise indicated. Comments provided by MassDEP support the proposed water treatment improvements. Comment letters on the EENF/Proposed EIR, submitted by MassDEP, the Department of Energy Resources (DOER), and the Cape Cod Commission, did not identify any additional information or analyses that should be provided in an EIR.

Alternatives Analysis

The FEIR evaluated No Build, Off-Site, Two-Plant Alternatives to the Preferred Alternative (also referred to as the Single-Plant Alternative). The No Build Alternative would take no further action to address concentrations of PFAS in the four Straightway/Hyannisport wells. Without additional treatment, the summertime capacity of the entire HWS (including all three treatment complexes) is 5.04 mgd, which is below the maximum daily demand of 5.3 mgd the HWS experienced in 2022. As a result, all of the available HWS wells and treatment infrastructure must pump continuously in the summer; should a treatment facility need to be taken off-line, the water demand would not be met.

The Off-Site Alternative would involve construction of new treatment facilities at another location. According to the FEIR, there is no available Town-owned land that is suitable for water supply development within the timeframe necessary for the project. Furthermore, the Off-Site Alternative is likely to have greater impacts and would be costlier than the Preferred Alternative due to the need to construct new water mains from the existing wells to the new treatment infrastructure.

The Two-Plant Alternative would include construction of a new treatment plant at the Straightway site to treat water from the Straightway Wells No. 1 and No. 2, and a new treatment plant at the Hyannisport site to treat water from the Hyannisport and Simmons Pond Wells. As proposed for the single treatment plant in the Preferred Alternative, both of the treatment plants would include greensand

[2] Available at: https://resilientma.mass.gov/rmat_home/designstandards/

filtration, UV-AOP treatment, GAC filtration units, and chemical injection for chlorination and pH and corrosion control. A tank or contact loop would be constructed at the Hyannisport treatment facility to achieve the required contact time. According to the FEIR, the Two-Plant Alternative would provide additional resiliency because one plant would continue to operate if the other failed. However, the Two-Plant Alternative would have greater environmental impacts than the Preferred Alternative associated with building a treatment facility at both the Straightway and Hyannisport sites, including increased land alteration, tree clearing, and impervious area. In addition, the treatment facility at the Hyannisport site would be located within the 500-year floodplain and at risk of flooding under future climate conditions.

As described above, the Preferred Alternative includes the construction of a new treatment plant at the Straightway site and well and pump replacements at the Hyannisport site. A building will be constructed around the existing and proposed GAC units so they are winterized and can provide adequate treatment capacity for the year-round removal of PFAS from water from all four wells. The Preferred Alternative will minimize impacts by constructing new facilities at the existing Straightway and Hyannisport sites, which will minimize new land alteration and tree clearing compared to the Two-Plant Alternative, which would include construction of new buildings and piping at each site. Relocating the Simmons Pond and Hyannisport Wells, as proposed in the Preferred Alternative, will allow them to withdraw water more efficiently and add resiliency by moving them out of the 500-year floodplain.

Environmental Justice

As noted above, the project area is located within an Environmental Justice (EJ) population designated as Minority and English Isolation, and within one mile of three EJ populations designated as Minority and four EJ populations designated as Minority and Income. Within the census tract containing the above EJ populations, Portuguese/Portuguese Creole are identified as languages spoken by 5% of more of residents who also identify as not speaking English very well. Effective January 1, 2022, all new projects within a DGA, as defined in 301 CMR 11.02, around EJ populations are subject to new requirements imposed by Chapter 8 of the Acts of 2021: *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy* ("Climate Roadmap Act") and amended MEPA regulations at 301 CMR 11.00. Two related MEPA protocols – the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol") and MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations ("MEPA Interim Protocol for Analysis of EJ Impacts") – are also in effect for new projects filed on or after January 1, 2022. Under the new regulations and protocols, all projects located in a DGA around one or more EJ populations must take steps to enhance public involvement opportunities for EJ populations, and must submit analysis of impacts to such EJ populations in the form of an EIR. The DGA for the project is one mile.

Community Engagement

Consistent with the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol"), the Town sent advance notification of the project in the form of an EJ Screening Form, translated into Portuguese, to a "EJ Reference List" provided by the MEPA Office and consisting of Community Based Organizations (CBOs) and tribes/indigenous organizations on July 1, 2024. No responses to the EJ Screening Form were received. The Town held a remote public informational meeting on August 6, 2024 at which Spanish and Portuguese interpreters were present. Notice of the meeting was mailed to 4,000 properties within the DGA. Approximately 10-

20 people were attended; however, it is not known if anyone used the channels for Portuguese and Spanish interpretation. Three people commented during the meeting in support of the project. The presentation shown at the July 1 meeting is posted on the Town's website. Notice of the MEPA remote consultation session was distributed to the EJ Reference List. The remote consultation session was held at 6:00 PM on October 3, 2024. The Town offered Portuguese interpreters upon request; however, no members of the public attended the consultation session. A recording of the MEPA consultation session has been posted on the Town's website. According to the FEIR, additional public meetings will be held as the project goes through the local zoning and planning approval process.

Baseline Conditions Assessment / Project Impacts

The FEIR included a baseline assessment of any existing "unfair or inequitable Environmental Burden and related public health consequences" impacting the identified EJ population in accordance with 301 CMR 11.07(6)(n)(1) and the MEPA Interim Protocol for Analysis of EJ Impacts. The baseline assessment included a review of the data provided by the Department of Public Health (DPH) EJ Tool applicable to the DGA regarding "vulnerable health EJ criteria"; this term is defined in the DPH EJ Tool to include any one of four environmentally related health indicators that are measured to be 110% above statewide rates based on a five-year rolling average. According to the FEIR, the data surveyed indicate that the Town of Barnstable does not exceed 110% of the statewide rates of any of the four vulnerable health EJ criteria, which include Childhood Lead Exposure, Childhood Asthma Emergency Department Visits, Low Birth Weight and Heart Attack Hospitalizations. None of the census tracts identified within the DGA exceed 110% of the statewide rates of Childhood Lead Exposure. One census tract (Block Group 2, Census Tract 153 in Barnstable) exceeds 110% of the statewide average for Low Birth Weight; however, the DPH EJ Tool labels the data as "Unstable" because there were only 2 cases reported and the results are not statistically significantly higher than the statewide average.

The FEIR indicated that the following sources of potential pollution exist within the DGA, based on data available in the DPH EJ Tool:

- Major Air and Waste facilities: 2
- M.G.L. c. 21E sites: 1
- Tier II toxics use reporting facilities: 5
- Sites with Activity and Use Limitations (AULs): 1
- Underground storage tanks (USTs): 5
- Public Water Suppliers: 1 (Hyannis Water System)
- Groundwater discharge permits:5
- Regional transit agencies: Bus route operated by the Cape Cod Regional Transit Agency with five bus stops within the DGA

According to the output report from the MA Resilience Design Tool included in the FEIR, the project site has a high exposure to sea level rise/storm surge, urban flooding due to extreme precipitation, and extreme heat. EJ populations near the site are likely also exposed to these climate risks. According to the FEIR, the project will not exacerbate climate risks within the DGA because the project is limited to construction of the WTP, which is not within the floodplain and below-ground water mains will not exacerbate flooding associated with extreme precipitation. As noted, the two Hyannisport wells, which are within the 500-year floodplain, will be replaced with new wells that are at higher

elevations to ensure resiliency and reliability of water supply.

According to the FEIR, the project will not have disproportionate adverse effects on EJ populations because there are minimal air emissions associated with the project; the project will not increase traffic during operations and have minimal traffic impacts during the construction period; and stormwater runoff will be managed on-site. The purpose of the project is to protect the public health of all residents served by the HWS, the majority of which are residents in EJ populations, by constructing a treatment facility that will ensure that the drinking water from the four wells in the Straightway/Hyannisport complex meets drinking water standards, including limits for PFAS.

Wetlands and Stormwater

Construction activities will take place within the 100-ft Buffer Zone of wetland resource areas at both the Straightway and Hyannisport locations. Direct impacts to resource areas are limited to 0.57 acres of Riverfront Area at the Hyannisport site; however, only 0.07 acres of Riverfront Area will be permanently impacted due to construction of the new pumping station building and other activities. According to the FEIR, the project will mitigate impacts to Riverfront Area by demolishing the existing Hyannisport pumping station building and restoring the area (6,100 sf) with landscaping using native plant species. In addition, the existing Simmons Pond well and pumping station, which are within the 100-ft Buffer Zone of Simmons Pond, will be relocated to a distance greater than 100 feet from the pond and the area within the Buffer Zone will be restored. The FEIR acknowledged that the Town will need to demonstrate that the project conforms with the Wetlands Regulations in order for the Barnstable Conservation Commission to approve the project.

According to the FEIR, the Straightway site has a stormwater management system consisting of infiltration basins that overflow during large rainfall events; there is no stormwater management system at the Hyannsiport site. The project will add 1.1 acres of impervious area at the Straightway and Hyannisport sites. According to the FEIR, the project includes construction of new stormwater management systems at each location that will be designed in accordance with the MassDEP Stormwater Management Standards (SMS), including requirements for pollutant removal and peak flow attenuation for storms up to the present-day 100-year storm event. The stormwater management systems will include deep-sump catch basins, infiltration basins, and subsurface infiltration systems. As described below, the proposed stormwater management system will be designed to address higher precipitation levels anticipated under future climate conditions.

Climate Change

Effective October 1, 2021, all MEPA projects are required to submit an output report from the MA Resilience Design Tool ("Tool") to assess the climate risks of the project. The FEIR included separate output reports for the Hyannisport and Straightway complex sites. Based on the output reports, proposed project components (new wells and pump stations) at the Hyannisport complex have a "High" exposure rating based on the site's location for urban flooding due to extreme precipitation and to extreme heat, and a "Moderate" exposure rating for sea level rise/storm surge. Based on the 40-year useful life and the self-assessed criticality identified for project components at the Hyannisport complex site, the Tool recommends a planning horizon of 2070 and a return period associated with a 50-year (2% annual chance) storm event when designing the wells and pump stations for riverine flooding and a

planning horizon of 2070 and a return period associated with a 200-year (0.5% annual chance) storm event when designing the wells and pump stations for sea level rise/storm surge.

The new water treatment facility proposed at the Straightway complex site has a "High" exposure rating based on the site's location for urban flooding due to extreme precipitation and to extreme heat, and a "Moderate" exposure rating for riverine flooding due to extreme precipitation; the site is not exposed to sea level rise/storm surge. Based on the 60-year useful life and the self-assessed criticality identified for the proposed water treatment facility at the Straightway complex site, the Tool recommends a planning horizon of 2070 and a return period associated with a 100-year (1% annual chance) storm event when designing the treatment plant with respect to extreme precipitation. For both the Hyannisport and Straightway locations, the Tool recommends planning for the 90th percentile for applicable extreme heat parameters.

The existing Hyannisport and Simmond Pond wells and pump stations are located at elevations of approximately 14 ft NAVD 88 and 8 ft NAVD, respectively. The wells and pump stations will be relocated to an elevation of 18.5 ft NAVD 88, which exceeds the 2070 200-year storm event wave action elevation of 18.2 ft NAVD 88 as reported in the Tool output report. As noted above, the Straightway site, including the existing wells and proposed treatment and pumping facilities, are not exposed to sea level rise/storm surge under projected 2070 conditions. According to the FEIR, the stormwater management systems will be designed with capacity for the future 24-hour precipitation depths recommended by the Tool: 8.7 inches for the Hyannisport site (based on the projected 2070 50-year storm event) and 9.7 inches at the Straightway site (based on the 2070 100-year storm event) to the extent practicable; however, the stormwater management system design has not been finalized and it may not be have the capacity to address the 2070 precipitation depths due to the high groundwater table at the sites. I encourage the Town to incorporate Low Impact Design (LID) and green infrastructure in the design of exterior areas, which will address both extreme precipitation and extreme heat under future climate conditions. According to the FEIR, the project will mitigate urban heat island effect by constructing new facilities within areas of existing disturbance and impervious area to minimize new impervious area and planting new trees.

GHG Emissions

According to the FEIR, the project's total emissions from water treatment processes and heating, cooling, and ventilation of conditioned spaces will be approximately 926 tons per year (tpy). Because this project does not exceed any mandatory EIR thresholds and is required to submit an EIR only because it is located within a DGA of EJ populations, a GHG analysis was not required because the project's GHG emissions will be less than 2,000 tpy. Nevertheless, the FEIR included a GHG analysis consistent with the requirements of the May 5, 2010, Revised MEPA Greenhouse Gas Emissions Policy and Protocol (MEPA GHG Policy) with respect to GHG emissions associated with heating, cooling, and ventilation of conditioned spaces in the proposed water treatment facility at the Straightway site and the two pump stations at the Hyannisport site. The GAC building and the portion of the water treatment facility which houses the treatment processes will be heated only. Key building design measures to minimize energy use and GHG emissions are listed below and include all- electric heating, cooling and hot water systems, high-efficiency building envelopes, a solar photovoltaic (PV) generating system, and an EV charging station. According to DOER, if the GAC building is to be heated above 55 degrees in the future, the proposed electric resistance unit heaters should be replaced with air source heat pumps.

Comments from DOER on the EENF/Proposed EIR did not identify any additional evaluations that are necessary if the Town commits to the mitigation measures listed below.

Construction Period

Proposed construction activities will generate solid waste, predominantly as a result of demolition activities. According to the FEIR, asbestos-containing material (ACM) is present in the existing buildings to be demolished; the contractor hired to construct the project will be required to manage ACM in accordance with all local, state, and federal regulations. According to MassDEP, there are no listed releases at the site that are subject to the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000); however, if any oil and/or hazardous material is encountered during construction, it should be reported to MassDEP, and a Licensed Site Professional (LSP) should be retained to evaluate the material and determine whether remediation is necessary.

All construction activities should be managed in accordance with applicable MassDEP regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management, etc.) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Proponent to reuse or recycle C&D debris to the maximum extent. Proposed construction-period mitigation measures are listed below.

<u>Mitigation & Section 61 Findings</u>

The FEIR included a separate chapter summarizing proposed mitigation measures and included draft Section 61 Findings. It contained commitments to implement these mitigation measures, identified the parties responsible for implementation, and included a schedule for implementation. As described in the FEIR, the Proponent has committed to implement the following measures to avoid, minimize and mitigate Damage to the Environment:

Environmental Justice/Public Health

- Provide drinking water that meets all drinking water standards to residents in EJ populations in the HWS service area by adding treatment for PFAS, 1,4-dioxane, manganese, and iron
- Continue to inform the public about the project by providing information on the town's web site and publicizing future meetings and permitting hearings concerning the project
- Construction of a new stormwater management system that will improve drainage compared to existing conditions which will be designed to comply with the SMS to minimize potential off- site flooding.

Stormwater Management

- Construction of new stormwater management systems at the Straightway and Hyannisport sites that will include deep sump catch basins, subsurface infiltration systems, and infiltration basins
- The new stormwater management systems will be designed to comply with the SMS requirements to treat and convey the present-day 100-year storm event
- Restore disturbed Riverfront Area to original site grades, and by revegetating disturbed areas
- Minimize impacts to wetlands and water quality by using sedimentation and erosion controls around work areas and other stormwater management measures required by the Order of Conditions and Storm Water Pollution Prevention Plan (SWPPP) prepared in accordance with the NPDES General Permit.

Climate Change

- Use all-electric heating and cooling systems in proposed buildings with conditioned space
- Plant new trees at the site
- Evaluate stormwater management system designs with sufficient capacity to treat and convey flows from projected future storm events, including the 2070 50-year storm event at Hyannisport site and the 2070 100-year storm event at the Straightway site
- Relocate the Hyannisport and Simmons Pond wells outside of the current 500-year flood plain and to an elevation of 18.5 ft NAVD 88, which exceeds the 2070 200-year storm event wave action elevation of 18.2 ft NAVD 88 as reported in the Tool output report

Greenhouse Gas Emissions

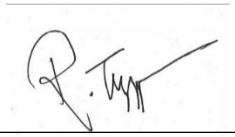
- Install an EV charging station that can charge two vehicles
- Buildings with conditioned space will include the following mitigation measures to minimize GHG emissions:
    - High efficiency building envelopes.
    - Low window to wall ratios.
    - Air source heat pumps for space heating and cooling in the control room, bathroom, and janitor closet space of the water treatment facility and in the two Hyannisport pump station buildings.
    - Electric resistance coil unit heaters will provide heating (no cooling) in the process area of the water treatment facility building and in the GAC building, which will be heated to 55 degrees only.
    - Electric storage tank domestic hot water heaters in the water treatment facility building and the Hyannisport pump station building.
    - A 25-kilowatt (kW) rooftop (or ground-based) solar PV generating system
    - 40% of the pitched roof areas will be made solar-ready.
    - A two-port EV charging station will be installed in the Straightway site parking lot; according to DOER, this commitment will meet the requirements of the Building Code because there will be fewer than 20 parking spaces at the site.
    - No use of fossil fuels (gas, propane, or oil).

Construction Period

- Install and maintain sedimentation and erosion controls around work areas and implement other stormwater management measures in accordance with the SWPPP.
- Minimize dust by implementing dust control measures, such as sweeping streets in work areas, covering dump trucks and sprinkling water or calcium chloride on disturbed areas.
- Minimize air emissions by using an emission control device such as a diesel oxidation catalyst or diesel particulate filter on each piece of diesel construction equipment, using ultra-low sulfur diesel (ULSD) fuel, prohibiting motor vehicle engines from idling more than five minutes, and require that diesel equipment meet EPA's Tier 4 Emissions Standards.
- Develop a traffic management plan to maintain safe roadway conditions for pedestrians, bicyclists and motorists.
- Notify MassDEP if any contaminated soil and groundwater is encountered during construction.
- Manage any contaminated soil and groundwater encountered during construction in accordance with applicable Massachusetts Contingency Plan (MCP) requirements and under the supervision of a Licensed Site Professional (LSP).
- Manage any asbestos cement water mains encountered during construction by storing and disposing of the material in accordance with the Solid Waste Management Regulations (310 CMR 19.00) and Air Quality Regulations (310 CMR 7.00) including requirements for handling and disposal of asbestos.

Conclusion

Based on a review of the FEIR I find that it adequately and properly complies with MEPA and its implementing regulations. No further MEPA review is required, and the project may proceed to permitting. Participating Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.



December 16, 2024
Date

Rebecca L. Tepper

Comments received:

10/11/2024	Cape Cod Commission
10/17/2024	Department of Energy Resources (DOER)
10/24/2024	Massachusetts Department of Environmental Protection (MassDEP)/Southeast Regional Office (SERO)

RLT/AJS/ajs

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

December 9, 2024

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

RE: FEIR Rollover Review EOEEA #16875
BARNSTABLE. Straightway and Hyannis
Water Treatment Facility Improvements at
228 Straightway and 132 Smith Street

Dear Secretary Tepper,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Final Environmental Impact Report Rollover (FEIR Rollover) for the Straightway and Hyannis Water Treatment Facility Improvements at 228 Straightway and 132 Smith Street, Barnstable, Massachusetts (EOEEA #16875). The Project Proponent provides the following information for the Project:

This project restores treated drinking water capacity, improves drinking water quality and resiliency of the Hyannis Water System (HWS) without substantially modifying the current land use. The restoration of water quality is in line with local, regional, state, and federal priorities. At a local level, Barnstable was one of the first municipalities to tackle per- and polyfluoroalkyl substances (PFAS) contamination in their water supply and this project continues their work to provide safe drinking water to residents.

Furthermore, the Hyannisport and Simmons Pond wells will be relocated to higher elevations outside of the 500-yr floodplain. Treatment operations will be relocated and centralized at the Straightway site, providing more protection from flooding. These original buildings (approximately 1,400 square feet) will be decommissioned at the end of the project and demolished to restore the floodplain and portions of the wetland buffer zone. This work aligns with Town of Barnstable's Hazard Mitigation Plan, which recommends that the Town "identify, evaluate, and fund measures to reduce the vulnerability of critical facilities…to natural hazards."

Comments/Guidance

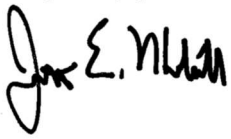
MassDEP offers this amplification to the Bureau of Air and Waste, Air Quality comment on the use of generators.

Should the Proponent decide to enroll any emergency generators in a demand response program,

it may affect the regulatory status of emergency generators and trigger additional plan approval requirements. The Proponent is recommended to consult with the MassDEP Southeast Regional Office New Source Review, Air Permit Section staff before enrolling in a demand response program.

MassDEP has no additional comments other than the ones previously raised in review of the Expanded Environmental Notification Forn, dated October 24, 2024. MassDEP is confident in the Proponent's ability to complete this Project in its capacity to enhance the water quality and quantity available to the Public Water Supply. Any technical detains can be resolved once the permit applications are submitted. If you have any questions, 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: Gerard Martin, Regional Director
John Handrahan, Deputy Regional Director, BWSC
Seth Pickering, Deputy Regional Director, BAW
Jennifer Viveiros, Deputy Regional Director, ADMIN
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Gilliane Tardieu, Drinking Water, BWR
Michelle Regon, Drinking Water, BWR
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Brendan Mullaney, Chief, Waterways, BWR
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