

**State of Connecticut, Department of Public Health
Drinking Water Section, Drinking Water State Revolving Fund (DWSRF)
ENVIRONMENTAL ASSESSMENT SUMMARY**

Date:	April 2, 2019	Staff Contact:	Eric McPhee
Applicant PWS Name:	Norwich Public Utilities	Town:	Montville/Bozrah
PWSID:	CT1040011		
Project Name:	Stony Brook North and South Transmission Main Rehabilitation		
Funding Source:	Drinking Water State Revolving Fund		
State Funds:	\$5,400,000.00		

This assessment is being conducted in conformance to the generic Environmental Classification Document for Connecticut state agencies to determine Connecticut Environmental Policy Act (CEPA) obligations

Project Description: The City of Norwich applied for financial assistance from the Drinking Water State Revolving Fund (DWSRF) program to support the rehabilitation/improvements of the northern and southern portions of the Stony Brook Transmission Main. A portion of the funding assistance for this project comes from General Obligation Bonds authorized under Connecticut General Statutes section 22a-483f approved by State Bond Commission at the May 12, 2017 State Bond Commission meeting. The project scoping notice of the original project was posted on the Council on Environmental Quality (CEQ)-Environmental Monitor (EM) website on August 7, 2012. The project post scoping notice was published on the CEQ-EM website on January 8, 2013.

Since this project was originally proposed, the drinking water quality in Norwich Public Utilities' (NPU) distribution system exceeded the Maximum Contaminant Level (MCL) for disinfection byproducts (DBP) and Trihalomethanes (TTHM). NPU signed Consent Agreement (DWS 16-104-044) dated August 18, 2017 with the Department of Public Health-Drinking Water Section (DWS) which documents actions that NPU agrees to take to resolve the MCL violation. One of the actions the City agreed to do is make improvements to the water system components to address the regulatory requirements.

NPU has proposed to make revisions to the original Transmission Main project design to reduce water age in the distribution system and improve water quality. The proposed project revision comprises of transmission main realignment and installation of approximately 3,700 linear feet of 24-inch diameter main and 600 linear feet of 16-inch diameter main. The new transmission main (24-inch diameter) installation begins on Leffingwell Road approximately 1,000 feet west of the intersection of Cove Brook Lane then runs along the road heading to Noble Hill Road and onto Route 82.

The new 24-inch diameter transmission main will be connected to the terminal end of a new 16-inch diameter distribution main that will be installed by the Town of Bozrah on Route 82. The new main will be comprised of 2,700 linear feet of 16-inch diameter water main on Route 82 along the parcel where The Optimus assisted living facility is proposed to be constructed in addition to the proposed replacement of approximately 1,300 linear feet of 6-inch distribution main with a new 16-inch diameter water main between New Concord Drive and the Norwich-Bozrah municipal boundary. This portion of main will be funded by the Town of Bozrah. The Town of Bozrah's main segment will be utilized to complete the transmission main looping of NPU's distribution main along Route 82 to eliminate an existing dead end and reduce water stagnation. Locating the transmission main within public rights-of-way will avoid crossing the sensitive environmental area, wetlands, and watercourses. This will also provide NPU crew easy accessibility in the future for maintenance and repairs as needed. The existing 24-inch diameter main located off public rights-of-way will be abandoned in place.

Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of environmental significance (direct/indirect)

1. Impact on air and water quality or on ambient noise levels

- a. Air Quality – Section 22a-174-18(b)(3)(C) of the RCSA limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. It should be noted that only the Department of Energy and Environmental Protection (DEEP) can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction in order to allow them to enforce idling restrictions at the project site without the involvement of DEEP.

DEEP typically recommends the use of newer off-road construction equipment that meets the latest EPA or California Air Resources Board (CARB) standards. If that newer equipment cannot be used, equipment with the best available controls on diesel emissions including retrofitting with diesel oxidation catalysts or particulate filters in addition to the use of ultra-low sulfur fuel would be the second choice that can be effective in reducing exhaust emissions. The use of newer equipment that meets EPA standards would obviate the need for retrofits.

DEEP also recommends the use of newer on-road vehicles that meet either the latest EPA or CARB standards for construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. On-road vehicles older than the 2007-model year typically should be retrofitted with diesel oxidation catalysts or diesel particulate filters for projects. The use of newer vehicles that meet EPA standards would eliminate the need for retrofits.

- b. Water Quality –Hydrostatic pressure testing wastewater discharges resulting from this project are authorized as “potable water system maintenance wastewaters” under the [Comprehensive General Permit](#) for Surface Water and Groundwater (Comprehensive General Permit). No registration is required under the Comprehensive General Permit for this discharge but NPU and SWSA must comply with operating conditions and effluent limits of the Comprehensive General Permit.
- c. Ambient Noise Levels - The proposed project is not expected to cause significant noise in the immediate area;

2. Impact on a public water supply or serious effects on groundwater, flooding, erosion, or sedimentation

- a. Water Supply – The proposed project is one of the actions that NPU has agreed to undertake in order to resolve the DBP MCL exceedance.

Water Diversion – NPU requested a determination from DEEP regarding a diversion permit for the proposed project. The DEEP issued a determination dated February 20, 2019 that states that the proposal is exempt from water diversion permitting requirements.

- b. Groundwater - DEEP is aware of an existing well pollution problem west of proposed water the transmission line extension along Route 82. There are a series of domestic and public water systems that are impacted with unacceptable levels of perchloroethylene (PCE) and trichloroethylene (TCE) and methyl tertiary butyl ether (MTBE) /benzene resulting from a dry cleaner release and underground storage gas tank release. DEEP recommends an assessment of the feasibility of extending the water transmission line a distance of 3,000’ west of the intersection

along Route 82 to serve the impacted properties with a permanent long-term supply of drinking water.

While extending the transmission main to the noted contaminated area is not within the scope of the Transmission Main Rehabilitation project, NPU has met with the Town of Bozrah and confirmed the ability to serve public drinking water to the area noted by the DEEP. The Town of Bozrah has initiated the preliminary design process to extend public water along Route 82 to serve this area.

- c. Flooding – Approximately 300 feet of the new transmission main located on Noble Hill Road is within the 100-year flood zone on the community’s flood insurance rate map. After water main installation, the roadway will be restored to original grades which will not impact the existing 100-year flood zone. Approximately 700 feet of transmission main located off of public rights of way and within the 100-year flood zone is being abandoned in place as a part of the proposed project. Relocating the transmission main to the public right of way will also increase resiliency of the system by providing easier access for maintenance and repairs in the future.
 - d. Erosion or Sedimentation – NPU will ensure that best management practices are implemented during construction to control erosion and sedimentation.
3. Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows – Wetlands along the proposed project route have been delineated by a soil scientist and field located as a part of the project survey. The wetland limits are shown on the project plans. There is no proposed wetland disturbance as a part of the project. Inland Wetlands Permits to perform work within the upland review area in the Towns of Montville and Bozrah have been secured by the respective Inland Wetlands Commissions and incorporated into the Contract Documents.
 4. Disruption or alteration of an historic, archeological, cultural or recreational building, object, district, site or surroundings - The proposed project is not expected to cause negative impacts.
 5. Effect on natural communities and upon critical species of animal or plant and their habitats: interference with the movement of any resident or migratory fish or wildlife species – The proposed project is not expected to cause negative impacts.
 6. Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact – The proposed project is not expected to cause negative impacts.
 7. Substantial aesthetic or visual effects - The project construction is expected to be completed in a short period of time. Due to the nature and timeframe of the project construction, the project is not expected to cause substantial aesthetic or visual impacts in the area.
 8. Inconsistency with the written and/or mapped policies of the statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency –The proposed project is consistent with the first Policy of Growth Management Principle #5: “**UTILIZE** a multiple barrier approach, including source water protection and appropriate treatment, to ensure the availability of safe and adequate public water supplies that meet or exceed state and federal drinking water standards.” The proposed project implements Barrier #2 of the Multiple Barrier Approach to protect public health: Risk Management. Risk management barriers focus on the protection provided by treatment and system operations. The proposed project is intended to

improve system operations to result in public drinking water that meets or exceeds federal drinking water standards.

9. Disruption or division of an established community or inconsistency with adopted municipal or regional plans-The City of Norwich's most recent Plan of Conservation and Development prioritizes supporting community infrastructure by providing for adequate infrastructure (water, sewer electric, natural gas, communications, etc.) to meet community needs...Resolution of a health based water quality issue is consistent with the plan.
10. Displacement or addition of substantial numbers of people - No significant impact expected.
11. Substantial increase in congestion (traffic, recreational, other) – The proposed project is not expected to create substantial traffic congestion in the area.
12. A substantial increase in the type or rate of energy use as a direct or indirect result of the action - No significant impact expected.
13. The creation of a hazard to human health or safety – No significant impacts expected.
14. Any other substantial impact on natural, cultural, recreational or scenic resources - No significant impact expected.

Conclusions:

Based on the DPH's environmental assessment of the proposed project which includes a review of the comments provided by the DEEP dated October 18, 2018 and response provided by NPU dated March 13, 2019, it has been determined that the project does not require the preparation of an Environmental Impact Evaluation (EIE) under CEPA. The DPH will coordinate with Norwich Public Utilities to ensure that the recommendations by the DEEP are implemented.