

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

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| Date: | January 7, 2020 | Staff Contact: | Eric McPhee |
| Applicant PWS Name: | Town of Bethel | Town: | Bethel |
| PWSID: | CT0090011 | | |
| Project Name: | Chestnut Ridge Storage Tank | | |
| Funding Source: | Drinking Water State Revolving Fund | | |
| State Funds: | \$1,300,00.00 | | |

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 Town of Bethel proposes to construct a new 500,000 gallon concrete water storage tank. The proposed tank will be 65-feet in diameter with an approximate height of 21-feet above grade. An electrical and instrumentation enclosure will also be located near the tank. This project supports Bethel's long term plan to replace its existing surface water supplies and treatment plants with ground water supplies by increasing the Town's overall storage capacity as indicated in Town's Water Supply Plan. The Chestnut Ridge Storage Tank will provide the needed additional emergency and fire protection storage, redundancy and backup to the Eureka Lake Water Storage Tank.

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.

Town of Bethel Response: The idling requirements and Clean Vehicle recommendations were added to the contract documents on Sheet C-1.

- b. Water Quality –DEEP Comment: 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.

Town of Bethel response: The proposed tank will be filled with water, disinfected and tested for leaks by measuring water level in the tank. It is not anticipated that the tank will be drained at the end of the test. If there is a need to discharge the hydrostatic pressure testing wastewater it would be classified as “potable water system maintenance wastewaters” under the Comprehensive General Permit for Discharges to Surface Water and Groundwater (Comprehensive General Permit) and the discharge would be dechlorinated and required to meet the effluent limits of the Comprehensive General Permit.

Stormwater: DEEP Comment: Stormwater discharges from construction sites where one or more acres are disturbed, regardless of project phasing, require an NPDES permit from the Permitting & Enforcement Division. The General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (DEEP-WPED-GP-015) will cover these discharges. For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to DEEP prior to the initiation of construction. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing post-construction stormwater management measures. The general permit also requires that post-construction control measures incorporate runoff reduction practices, such as LID techniques, to meet performance standards specified in the permit. Projects defined as Locally Exempt (not requiring a permit from the municipality) that have a disturbance area over one acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to DEEP. For further information, contact WPED at 860-424-3018. The construction stormwater general permit registrations can be filed electronically through DEEP's e-Filing system known as ezFile. Additional information can be found on-line at Construction Stormwater GP.

Town of Bethel Response: The overall site disturbance is approximately 0.8 acres. If the contractor disturbs additional area beyond the 0.8 acres and more than 1 acre, he will be required to submit a General Permit for the Discharge of Storm Water and Dewatering Wastewaters Associated with Construction Activities (DEEP-WPED-GP-015). A copy of the permit is included in the contract documents.

- 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 – This project supports Bethel's long term plan to replace its existing surface water supplies and treatment plants with ground water supplies by increasing the Town's overall storage capacity as indicated in Town's Water Supply Plan.

- b. Groundwater – The proposed project is not expected to cause significant impacts to groundwater.
 - c. Flooding – No significant impacts expected.
 - d. Erosion or Sedimentation – The Town of Bethel 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 – DEEP recommends that a certified soil scientist perform a reconnaissance of the site in order to determine whether there are any areas which would be regulated as wetlands or watercourses as defined by section 22a-38 (15) and (16) of the Connecticut General Statutes (CGS), respectively. If the reconnaissance identifies regulated areas, they should be delineated. Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the CGS. Many local agencies have established setback or buffer areas and require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements. In order to protect wetlands and watercourses on and adjacent to the site, strict erosion and sediment controls should be employed during construction. The Connecticut Guidelines for Soil Erosion and Sediment Control prepared by the Connecticut Council on Soil and Water Conservation in cooperation with DEEP is a recommended source of technical assistance in the selection and design of appropriate control measures. The 2002 revised edition of the Guidelines is available online at: Erosion Control Guidelines.

Town of Bethel Response: Wright-Pierce retained a soil scientist and conducted wetland delineation on the site as part of the design effort. Wetlands were delineated and are shown on the design plans. Wright-Pierce submitted a wetland application to the local Inland Wetland Commission and received a wetland permit for the proposed activities. A copy of the permit is included as part of the contract documents. Erosion and sedimentation controls and details are shown on design plans and will be in place to protect existing wetlands in accordance with the 2002 revised edition of the Guidelines.

- 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 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 #1: “**ENSURE** the safety and integrity of existing infrastructure over its useful life through the timely budgeting for maintenance, repairs and necessary upgrades.” It is also consistent with the second policy of Growth Management Principle #5: “**IDENTIFY** water supply resources sufficient to

meet existing demand, to mitigate water shortages during droughts, and to meet projected growth and economic development over at least the next 50 years.”

9. Disruption or division of an established community or inconsistency with adopted municipal or regional plans-The proposed project is consistent with the Town of Bethel’s plan for water supply improvements as documented in the Water Supply Analysis in the adopted “Master Plan Report prepared for the Town of Bethel” dated July 18, 2016: “The Town is planning to implement significant supply improvements to the water infrastructure to remove the current limitations on water supply and ensure the town will have sufficient water supply in the future including the proposed TOD (Transit Oriented Development) Master 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 – DEEP comment: A review of the map included in the Environmental Monitor shows that the approximate location for the storage tank is close to the residential property due east. Please consider centrally locating the tank between the east and west properties. It appears there is an insufficient buffer from a safety standpoint between the proposed location and the residential property if there were a catastrophic event with the water tank.

Town of Bethel Response: Wright-Pierce evaluated moving the tank centrally between the east and west properties (moving the tank south), however that would require additional excavation and blasting of ledge to bring the tank to the proposed design floor elevation of 627 feet and below to approximate elevation of 625 feet for bottom of excavation. Blasting could disturb existing residential wells and septic tanks. The proposed tank location eliminates the need for blasting and minimizes the excavation on the site based on geotechnical borings. The proposed water tank will be screened from the properties to the east by existing ledge outcrop, rows of evergreens and proposed trees. The tank site and the properties are separated by a high point running along the existing stone wall (from elevation 625 feet to elevation 650 feet) providing additional screening and protection from runoff of water. Catastrophic failure of this type of tank is very unlikely. If the tank developed a leak, the leak would be very slow over a long time and would be eventually noticed by the Bethel Water Department staff. Based on the proposed site grading, the water would infiltrate the ground and drain to south (biorientation basin), west and to the north, and it would not impact the two residential properties to the east.

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 August 2, 2019 and response provided by Wright-Pierce on behalf of the Town of Bethel dated November 1, 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 the Town of Bethel to ensure that the recommendations by the DEEP are implemented.