

**Agency of Natural Resources  
Vermont Department of Environmental Conservation  
Drinking Water and Groundwater Protection Division**

**General Water Main Construction Permit  
February 9, 2022**

**I. Purpose and Authority**

Vermont Statute and the Vermont Water Supply Rule (Environmental Protection Rules Chapter 21, effective March 17, 2020, as amended) (hereinafter referred to as “the WSR”) prohibit the construction, modification, alteration or renovation of a public water system (PWS) without first receiving a permit from the Secretary of the Agency of Natural Resources (Secretary). The Secretary is issuing this General Water Main Construction Permit (General Permit) for authorization to construct eligible water main replacements and extension projects for public water systems. This General Permit is issued in accordance with 10 V.S.A. § 1675, Chapter 56 and Subchapter 21-3 of the WSR.

This permit does not authorize operation of an eligible proposed project. Once the activities authorized by this General Permit have been completed, but prior to placing them into operation, the written signed and stamped Engineer Certification required by Condition (IV)(F) of this permit shall be provided to the Drinking Water and Groundwater Protection Division (Division).

**II. Definitions**

All terms used in this General Permit shall have the definitions assigned to them as set forth in the WSR or otherwise shall have their common meaning.

**III. Qualifications for Coverage Under this General Permit**

Coverage under this General Permit is available for activities, including construction, modification, alteration, or renovation to a PWS, that meet all the following qualifications:

**A. The proposed project consists of any of the following:**

1. Water main extensions equal to or less than 500 feet that include one or more new fire hydrants and that have a hydraulic calculation showing estimated pressure and flow adequate to meet the WSR; or

2. Water main extensions more than 500 feet, with or without new fire hydrant(s) and that have a hydraulic calculation showing estimated pressure and flow adequate to meet the WSR; or
  3. Water main replacements of pipe with pipe of equal diameter or larger.
- B.** The proposed project consists of distribution network elements. Non-distribution network elements and certain distribution-related project elements as listed in **Appendix A** are not eligible for coverage under this General Permit.
- C.** The Secretary has determined that the proposed project will comply with the WSR and will not constitute a public health hazard or significant public health risk.

#### **IV. Conditions**

- A. Application for Coverage.** Any person who wishes to obtain authorization to construct a proposed project under the terms of this General Permit shall file an administratively and technically complete application with the Secretary.
- B. Applicable Standards.** The proposed project shall be constructed, tested, and inspected in accordance with this General Permit, the WSR, and the applicable NSF and AWWA standards required by the WSR. The engineering drawings and specifications shall be kept on record by the Permittee and water system for a minimum of 12 years and be made available upon request by the Division for audits.
- C. Field Inspection.** Field inspection of the project shall be performed under the responsible charge of a Vermont-licensed Professional Engineer.
- D. Flushing, Pressure Testing, Disinfection, Bacteriological Sampling.** Prior to being placed into operation, the newly constructed portions of the Water System shall be flushed, pressure tested, disinfected, and flushed again. After this procedure, at least two bacteriological samples must be collected from representative sample points, collected at least 16 hours apart, or 15 minutes apart after at least a 16-hour rest period as per AWWA Standard C651. The samples shall be sent to a Vermont Department of Health certified laboratory for a Total Coliform/E. coli (Enzyme Substrate) test. The Permittee shall indicate on the laboratory form that the sample is for "Construction Permit Compliance." Coliform Absent sample results are required before the proposed project infrastructure may be placed into operation for potable water use. Satisfaction of this Condition (IV)(D) and any other criteria established by the supplying system shall be satisfied prior to serving water. The pressure/leakage and bacteriological test results required by this condition shall be submitted to the Division.
- E. Submission of Record Drawings.** Record drawings shall be prepared by the Vermont-licensed Professional Engineer responsible for observation of construction of the proposed project and shall depict the system as it was constructed, including any field modifications. Record drawings shall be dated, contain the engineer's seal and signature on each sheet, and shall be kept on file by the PWS if the PWS is the Permittee or submitted to the PWS providing water within 60 days of final field inspection and

approval. The record drawings shall be kept on record by the Permittee for a minimum of 12 years and be made available upon request by the Division for audits.

**F. Engineer Certification.** An Engineer Certification including the language below shall be prepared by the Vermont-licensed Professional Engineer responsible for the observation of construction and submitted with a signed seal affixed, and submitted to the Division and the PWS providing water within 60 days of final field inspection and approval:

“I hereby certify that in the exercise of my reasonable professional judgment the construction-related information submitted is true and correct and that the components of the Public Water System authorized by General Water Main Construction Permit # [C-1234-22.0]

- a) Were installed in accordance with:
  - The permitted design and all permit conditions; or
  - Record drawings that are in compliance with the applicable rule, that were filed with the supplying water system, and are in accordance with all other permit conditions;
- b) Were properly inspected;
- c) Were properly tested;
- d) Met the supplying system’s approval; and
- e) Have successfully met those performance tests as required in the General Water Main Construction Permit, condition (IV)(D).”

**G. Contaminated Soils; Reporting.** If evidence of the presence of hazardous materials (e.g., petroleum hydrocarbons, chlorinated solvents) are encountered during any phase of construction, ductile iron pipe materials shall be utilized with fluoroelastomer gaskets. All pipe materials less than 3-inches in diameter must be copper pipe containing pressure fittings, and all other appurtenances shall be of material resistant to the contamination. The Permittee shall immediately report encountering any contaminated soils during this project. Notification shall be made Monday through Friday, 7:45 AM to 4:30 PM; to the Waste Management & Prevention Division at (802) 828-1138, and at all other times including State holidays: to the Department of Public Safety Division of Emergency Management and Homeland Security at (800) 641-5005.

**H. Leaded Components.** If leaded components including goosenecks and service lines are encountered during performance of the work authorized by this permit, the Permittee shall adhere to the following conditions:

1. Any leaded components encountered within the Public Right-of-Way during construction shall be replaced with lead-free components.
2. Within seven days of encountering the leaded components, the Permittee shall provide a letter to the Division. This letter shall describe the leaded components encountered; the location of the leaded components, including identification of applicable 911 addresses and information about the Landowner where the infrastructure is located; description of the actions performed to replace the leaded

components; a description of the notifications provided to PWS users affected by the encountered lead-containing infrastructure; and a description of additional activities planned to be taken by the Permittee to address the leaded components. All leaded components encountered during this project shall be clearly depicted on the record drawings required per Condition (IV)(E) of this permit.

- I. Letter of Approval / Wastewater System and Potable Water Supply Permit.** Water service connections from the valve, curb stop, or corporation stop at the distribution pipe, to individual buildings or structures, shall not be constructed prior to (a) the issuance of a letter of approval from the PWS to the person requesting the water service connection, and (b) the issuance of a Wastewater System and Potable Water Supply Permit by the Division as required. PWS letters of approval shall indicate that minimum quantity, quality, and pressure requirements can be provided to the service entrance of the buildings being served. No water service connections from lead-in lines servicing fire hydrants are permissible. No new or modified water service connections shall be constructed without first receiving a determination by the Division as to whether a Wastewater System and Potable Water Supply Permit is required.
- J. Hydrant Testing.** Where applicable, the Permittee(s) shall coordinate with the PWS and the professional engineer responsible for observation of construction to perform flow-testing of new and/or replaced fire hydrants within sixty (60) days of construction completion. If any or all of the fire hydrant(s) are unable to meet minimum flow conditions, per Appendix A, Part 7.0.1 of the WSR, while maintaining adequate pressure at all points in the distribution system per Appendix A, Part 8.1.1. of the WSR, the deficient fire hydrant(s) must be removed within ten (10) days of flow testing.
- K. Posting of Authorization.** The Permittee shall post the current valid authorization subject to this General Permit in a conspicuous place at the location of proposed activities. For linear projects, the notice of authorization shall be posted at a publicly accessible location near the active part of the project, or, in the event posting in a publicly accessible location near the active part of the project is infeasible, the Permittee shall post in a local public building (such as the municipal office or public library).
- L. Changes to Proposed Project.** No changes shall be made to the proposed project without prior written approval of the Division. A new authorization under this General Permit is required for all significant modifications to activities that qualify for coverage under this General Permit and modifications to the PWS pursuant to Subchapter 21-4, Section 4.0.1 of the WSR. Any proposed changes that do not meet qualifications for coverage under this General Permit may require an individual permit pursuant to Condition (VI)(M). All modifications from the proposed project must be reflected in the record drawings prepared per Condition (VI)(E).
- M. Requiring an Individual Permit.** The Secretary may require a Permittee to apply for an individual permit if the proposed project activities no longer meet the qualifications for coverage identified in Section III and Appendix A of this General Permit.
- N. Continuation of Expired Authorizations.** Authorization to construct the proposed project shall terminate on the expiration of an authorization issued under this General Permit. If the proposed project has not been completed by the project authorization

expiration date, the Permittee shall submit an application for a new authorization under this General Permit.

**O. Incomplete Projects.** If the total proposed project is incomplete by the expiration of an authorization, but the permittee wishes to place a completed section into operation, or the Permittee wishes to apply for a new authorization under Condition (VI)(N) above, the Permittee is required to submit the following information, prior to the completed section of infrastructure being placed into operation:

1. Pressure/leakage and bacteriological test results to the Division.
2. Record drawings prepared by the Vermont-licensed Professional Engineer responsible for observation of construction to the PWS providing water within 60 days of field inspection and approval of the section of infrastructure being placed into operation. The record drawings shall depict the section as it was constructed, including any field modifications. Record drawings shall be dated, contain the Engineer Certification, seal and signature on each sheet and submitted to the PWS providing water within 60 days of final field inspection and approval. This package shall also include any related information for each phase, step, or iteration of the project's completion as determined necessary by the PWS.

In addition to the requirements above, the Record drawings shall be kept on record by the Permittee for a minimum of 12 years and be made available upon request by the Division for audits.

**P. Transfer of Ownership or Control.** Authorization under this General Permit is not transferable or assignable. An authorization shall be invalid upon a change of ownership or control of the proposed project. If a change of ownership occurs prior to the completion of construction and submittal of Engineer Certification, the new owner must apply for and obtain a new authorization under this General Permit.

**Q. Right of Access to Water System; Records.** For purposes of ensuring compliance with this General Permit, the WSR, and other applicable laws and requirements, the Secretary or duly authorized representative, upon presentation of appropriate credentials and at reasonable times, may access the PWS and enter the property on which the PWS is located in. Access shall be for the purposes of:

1. ascertaining compliance of the proposed project with applicable Vermont environmental laws, the WSR, this permit and any authorization; and
2. gain access to and make copies of any records, reports, or other documents related to the construction, testing, and inspection of the proposed project.


**R. Fees.** The Permittee shall pay the fee for proposed construction activities as required by 3 V.S.A. § 2822.

**S. Permit Modification.** The Secretary may modify and reissue this General Permit when:

1. Vermont law, the WSR, or any standards adopted pursuant thereto are revised and such revisions justify the application of different or additional conditions; or
  2. The Secretary determines that other good cause exists for amendment based on the need to protect human health or the environment.
- T. Anticipated Noncompliance.** The Permittee shall give advanced notice to the Secretary of any planned changes in the proposed project which may result in noncompliance with this General Permit or any authorization issued hereunder.
- U. Duty to Comply, Enforcement.** The Permittee shall comply with all conditions of this General Permit and the Permittee's authorization issued hereunder. Any noncompliance with the terms of this Permit or an authorization shall constitute a violation of 10 V.S.A. Chapter 56 and the WSR. Pursuant to 10 V.S.A. Chapters 56, 201 and 211, any violation of the terms and conditions of this permit, authorization, or any approved compliance schedule, may serve as grounds for the initiation of an enforcement action by the State against the Permittee.
- V. Permit Suspension or Revocation.** The Secretary may suspend or revoke an authorization issued pursuant to this General Permit in accordance with Section 3.2 of the WSR.
- W. Access to Records.** Upon request of the Secretary, the Permittee shall provide the Secretary with access to records, reports, and other documents related to the proposed project.
- X. Effective Compliance with WSR and Other Laws:** Compliance with this General Permit does not relieve any person of obligations under other applicable provisions of the WSR, regulations, or permitting authorities, including from any obligation to obtain other permits or approvals that may be necessary for the project.
- Y. Appeals.** This General Permit may be appealed to the Environmental Division of the Vermont Superior Court within 30 days of the date the final permit is posted to the Agency's Environmental Notice Bulletin in accordance with 10 V.S.A. Chapter 220.
- Z. Permit Expiration:** This General Permit shall not expire but may be modified and reissued.

Signed at Montpelier, VT this 9<sup>th</sup> day of February, 2022.

Peter Walke, Commissioner  
Department of Environmental Conservation

By   
Ben Montross, Drinking Water Program Manager  
Drinking Water and Groundwater Protection Division

## Appendix A

### **Condition (III)(B): Non-Distribution-Related and Ineligible-Distribution-Related Project Elements Description**

Coverage under this General Permit is only intended for certain distribution network project elements. Coverage under this General Permit is not eligible for non-distribution network project elements and certain distribution-related project elements including the following:

1. Relining of pipes.
2. Connection of a new source.
3. Treatment modifications.
4. Designs that have not received a required variance or exemption from the Water Supply Rule.
5. Replacing water main with pipe that is not the same inner diameter or larger.
6. A change in the size of a pump or pump capacity of a pump.
7. Alteration, construction, renovation, or conversion of an existing or new storage tank.
8. Installation of a new pressure reducing valve or vault.
9. Extending water main for a water system that is not permitted to expand.
10. Extending water main for a water system with unresolved Sanitary Survey or Permit to Operate deficiencies related to pressure and flow.
11. Extending water main for a water system for which hydraulic calculations show that the estimated pressure and flow are inadequate.
12. Installing fire protection hydrant(s) for a water system that is not permitted to provide fire protection.
13. Installing fire protection hydrant(s) for a water system that does not have hydraulic calculations that show there is sufficient pressure and flow for fire protection.