



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Drinking Water and Environmental Health Division

**Copper Silver Treatment
Efficacy Requirements**

EGLE will consider permitting copper silver ionization (CSI) treatment systems that have been shown to be effective in meeting an intended treatment objective. Demonstrations of efficacy must be made through testing that meets all the requirements listed below. The following information and documentation related to the testing must be provided for the EGLE review:

1. The testing must have been conducted on the specific model of system being proposed in the permit application. Please provide the model of the system and indicate where in the supporting documentation that test results make reference to this model.

2. The testing must have been conducted by an independent third-party and/or must follow a nationally recognized standard as determined by EGLE. The standard must be available for review by EGLE. Please attach a copy of the standard.

3. The testing must include a pass/fail criterion which considers a kill rate of the specific pathogen(s) that the device is intended to treat against. Please indicate the specific pathogen(s) and the kill rate criterion.

4. The testing must demonstrate that the system is capable of consistently maintaining the required dose(s) of disinfectant for effectiveness. Please describe the intended disinfectant dose(s) and indicate where in the supporting documentation that testing showed the disinfectant could be consistently maintained.

5. The testing must subject the system to the conditions of operating in a premise plumbing environment. Please indicate where in the supporting documentation that a description of the testing environment is provided.

6. The testing must be conducted across a water quality range (pH, temperature, disinfectant concentrations, etc.) that is representative of the proposed application. Please indicate where in the supporting documentation that these parameters are provided.

7. The efficacy testing must also include the copper and silver concentrations measured throughout the test. The testing must be done through an U.S. Environmental Protection Agency (EPA) or State of Michigan certified laboratory or with a device or kit that uses an EPA approved method. Please indicate where in the supporting documentation that copper and silver concentration measurements are provided.

Once this form is complete, it may be submitted along with supporting documentation to EGLE at EGLE-ST@Michigan.gov.

If you need this information in an alternate format, contact EGLE-Accessibility@Michigan.gov or call 800-662-9278.

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