

Required Information for the Review of Site-Specific Commercial Water Treatment Devices

General: A complete plumbing application (SBD-6154) and complete plumbing plan must be submitted and approved prior to each proposed installation in accordance with SPS 382.20 (1) (a) 2. A minimum of three complete sets of plans and specifications, signed by a Wisconsin registered architect, designer, engineer or licensed master plumber, shall be submitted along with the following specific information:

1. A Plumbing Plan Review Application” (i.e. form SBD-6154) and the required fee. The fee is \$160 minimum, billed at a rate of \$80 per hour after the first two hours.

<http://dsps.wi.gov/SB/docs/SB-FormPlumbing6154App.pdf>

2. Three copies of a scaled plot plan and/or scaled floor plan as appropriate for a given design.

3. Three copies of isometric drawings of all affected piping systems.

4. Three copies of a completed water calculation worksheet for all pertinent water supply systems.

<http://dsps.wi.gov/SB/docs/SB-FormPlumbing1WaterCalc6479.xls>

<http://dsps.wi.gov/SB/docs/SB-FormPlumbing1WaterCalc6479Instrc.pdf>

5. A copy of all promotional materials (e.g. sales literature, audio and video presentations) that will be used with the device in Wisconsin, if any.

6. A written detailed description of the device and its intended function(s).

7. Detailed assembly drawings.

8. All device labeling.

For examples of what information is typically required to appear on an acceptable label consult the appropriate national standard from item #9 of this list.

9. Complete installation instructions, including detailed installation drawings indicating all connections between the device and a plumbing system.

10. Specifications for all wetted (i.e. water contacting) materials of construction. All wetted materials of construction must also be documented as acceptable for contact with potable water. Examples of acceptable documentation include:

a. For materials that are listed by NSF, U.L. or WQA, specify the manufacturer’s name, material, trade designation, the standard the material is listed under and that the material is listed by NSF, U.L. or WQA.

b. The results of a chemical extraction test performed in accordance with the appropriate NSF standard.

c. For materials that are accepted for repeat use food contact by the United States Food and Drug Administration (FDA), specify the manufacturer’s name, material, trade designation and the specific Code of Federal Regulations (CFR) number.

d. For metallic materials, specify the percentage composition of each metal or alloy.

7. A list of all standards to which the device conforms with, if any.

8. The trade name, scientific name and chemical formula of any chemical used in the device that may be added to or leached into the water as part of the treatment process or as a results of the treatment process. Documentation must be included showing that these chemicals are accepted for use with potable water by the EPA, FDA, NSF, U.L. or WQA, or other national agency acceptable to the department.

Devices that contain a media or substance that requires the sacrificial release of regulated contaminants to reduce specific contaminants from water must include effluent monitoring for the contaminant in conjunction with all effluent samples.

9. A signed report, by an independent testing laboratory or the manufacturer, which concludes that the device performs in accordance with the assertions submitted to the department. The test/engineering report must be complete enough to verify acceptable testing protocols and/or engineering calculations were used, and to identify the laboratory/company/individuals that performed the testing/engineering calculations.

Acceptable testing protocols include those specified in the following standards:

NSF/ANSI *International* Standards 42, 53, 55, 58 or 62

WQA Standards S-100, S-200, S-300 or S-400

While the standards listed above are not specifically designed for use with commercial/industrial devices, they remain a sound basis for testing commercial/industrial devices and for guidance. In some cases, a standard testing protocol may need to be altered to accommodate testing of a given device. If varying from the testing protocols contained in the aforementioned standards, it is **strongly** recommended that the variations be accepted by this department in writing **prior to** performing any testing on the device. Otherwise we cannot guarantee that the results of the testing will be accepted.

10. A graph indicating the pressure loss, in psig, through point-of-entry devices, over the entire flow rate ranges of the devices. Point-of-use devices are exempt from this requirement.

11. A hydrostatic pressure test. As a minimum, a hydrostatic pressure test performed at 150 psig, for a duration of fifteen minutes, at a water temperature of approximately 73.4° F. This information is only required for in-line devices subject to line pressure. Devices that discharge to atmosphere are exempt from this requirement.

12. An operation and maintenance manual or instructions. For examples of minimum information which should be included in the manual or instructions, see the appropriate standard from item #9 of this list.

13. The unique WDNR Public Water Supply I.D. Number (i.e. PWSID#) for the well(s) being Treated

Other Information

Devices that are private labeled (i.e. manufactured by one company, but labeled for another) require separate submittals.

The scope of Wisconsin's water treatment device review program is limited to devices serving:

- a. One and two family dwellings (e.g. homes and duplexes).
- b. Two or less dwelling units in a multi-family dwelling (e.g. apartments and condos)
- c. Non-transient non-community (NTNC) water systems. NTNC water systems are water systems that serve at least 25 of the same people over six months of the year. Examples of NTNC systems include, but are not limited to, schools, daycares, factories and businesses.
- d. Transient non-community (TNC) water systems. TNC water systems are water systems that serve at least 25 people at least 60 days of the year but do not serve the same 25 people over six months of the year. Examples of TNC systems include, but are not limited to, motels, restaurants, parks, taverns and gas stations.
- e. In-store, consumer self-service, bottled water vending machines

Water treatment devices not covered by categories a-e immediately above are exempt from the device review process. For categories "c" and "d", the review process is applicable only to devices installed to mitigate a regulated, health effecting contaminant and aesthetic devices installed as required pre-treatment for devices installed to mitigate health effecting contaminants.

The Safety and Buildings Division reserves the right to request any specific performance test data required to make a final determination on a device.

Any questions, comments or suggestions, please contact Glen Schlueter.

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Work Hours: 8 a.m. to 4:30 p.m. CST