

## Other Plumbing References

- SPS 382.30 Drain Systems
- 382.31 Venting Systems
- 282.34 Wastewater Treatment
- 382.35 Cleanouts
- 382.36 Stormwater Plumbing
- 382.38 Discharge Points
- 382.40 Water Distribution
- 382.41 Cross Connection Control
- 382.60 Supports
- 384.00 Plumbing Products

**Table 382.70-1  
Plumbing Treatment Standards**

Intended Use	Plumbing Treatment Standards
1. Drinking, cooking, food processing, preparation and cleaning, pharmaceutical processing and medical uses	NR 811 and 812 approved sources
2. Personal hygiene, bathing and showering	NR 811 and 812 approved sources
3. Automatic fire protection systems	As acceptable by local authority
4. Swimming pool makeup water	NR 811 and 812 approved sources
5. Swimming pool fill water	DHS 172 requirements
6. Cooling water <sup>b</sup>	pH 6-9 <sup>b</sup> ≤ 50mg/L BOD <sub>5</sub> ≤ 30 mg/L TSS Free chlorine residual 1.0 – 10.0 mg/L <sup>b</sup>

**Table 382.70-1  
Continued**

Intended Use	Plumbing Treatment Standards
7. Subsurface infiltration and irrigation, using reuse as the source <sup>c</sup>	≤ 15 mg/L oil and grease ≤ 30 mg/L BOD <sub>5</sub> ≤ 35 mg/L TSS ≤ 200 fecal coliform cfu/100 mL <sup>d</sup>
8. Subsurface infiltration and irrigation using storm water as the source <sup>c</sup>	< 15 mg/L oil and grease < 60 mg/L TSS
9. Surface or spray irrigation using storm water and clearwater as the source <sup>c</sup>	≤ 10 mg/L BOD <sub>5</sub> ≤ 5 mg/L TSS
10. Surface irrigation except food crops, vehicle washing, clothes washing, air conditioning, soil compaction, dust control, washing aggregate and making concrete <sup>a, c</sup>	pH 6-9 <sup>b</sup> ≤ 10mg/L BOD <sub>5</sub> ≤ 5 mg/L TSS Free chlorine residual 1.0 – 10.0 mg/L <sup>b</sup>
11. Toilet and urinal flushing	pH 6-9 <sup>b</sup> 200 mg/L BOD <sub>5</sub> ≤ 5 mg/L TSS Free chlorine residual 1.0 – 4.0 mg/L <sup>b</sup>
12. Uses not specifically listed above	Contact department for standards

## The Future Includes Water Resource Management

Water reuse is part of the equation on solutions to limited water resources.

# Water Reuse

## Using Water to its Full Potential



State of Wisconsin

Dept. of Safety & Professional Services

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On May 1, 2003 the Division of Industry Services created the ability to reuse water through Wisconsin Administrative Code. SPS 382.70 was created to specify water quality standards for specific intended use. These standards apply to potable and non-potable waters. This rulemaking largely focuses on water quality and its intended use. As always, the underlying objectives of rulemaking are to ensure that Wisconsin's rules protect environmental quality and public health.

## Water is Water

Water is "consumed" in the sense that it is transformed from drinking water into a variety of lower quality grades, all of which are discharged directly to the drain and make their way to the treatment plant.

Not all functions associated with water need potable water in order to perform satisfactorily. Only 15% of all water used in the home would need to be potable (drinking water). Homes are the places with the most potential for saving water. What water is called depends on how it is used.



## Water Reuse Initiative

In and around the home, wastewater generated could be collected and put through a filtration and disinfection process to supply water to toilets, hose valves, and to irrigate lawns and landscaping. This wastewater could come from water closets, showers, lavatories, clothes washers, and storm water from roof areas.

The filtration and disinfection equipment is predicated on the quality of the collected wastewater, be it graywater, blackwater, or storm water. The purpose of this equipment is to condition the water to a level of quality consistent with the intended reuse of the water per Table 382.70-1.

## Plan Review Requirement

A site specific plan needs to be created by the installing plumber or a licensed engineer and submitted to the Department of Safety and Professional Services for state level plan review and approval. This is required for all plumbing systems that reuse wastewater and storm water. Plan review focuses on the plumbing engineering of the system, components' reliability, contingency plans, cross-connection control, and system maintenance and reporting. A deed attachment is also required for residential installations that define the system, related maintenance protocol, and required test reports.

## Care and Diligence

Extreme care must be exercised to ensure that exposure or accidental consumption of non potable reuse water systems is avoided. It is also very important to avoid the contamination of any drinking water supply.

## SPS 38.70 Plumbing Treatment Standards

- (1) Purpose. The purpose of this section is to establish plumbing treatment standards for plumbing systems that supply water to outlets based on intended use.
- (2) Scope. The provisions of this section apply to plumbing systems that supply water to outlets.
- (3) General Requirements. A plumbing system shall supply water that is of a quality that will protect public health, the waters of the state, and be suitable for the intended use.
- (4) Minimum Requirements.
  - (a) Except as provided under part (b), a plumbing system shall supply a quality of water at the outlet or termination of the plumbing system that meets or exceeds the minimum requirements as specified in Table 382.70-1.
  - (b) For an outlet other than a plumbing fixture, appliance, or appurtenance, there may be more stringent requirements assigned by a municipality, governmental unit, state agency, or the owner of the plumbing system.