

**4720.3932 FLOCCULATION (SLOW MIXING).**

Subpart 1. **Basin design.** Inlet and outlet design must prevent short circuiting and destruction of floc. A drain must be provided.

Subp. 2. **Detention.** Minimum flow-through velocity must be not less than 0.5 feet or greater than 1.5 feet per minute with a detention time for floc formation of at least 30 minutes.

Subp. 3. **Equipment.** Agitators must be driven by variable speed drives or other means which vary the peripheral speed of paddles in the range of 0.5 to 3.0 feet per second. Uniform mixing must be provided to prevent settling in the flocculation basin.

Subp. 4. **Piping.** Flocculation and sedimentation basins must be as close together as possible to avoid settling out. The velocity of flocculated water through pipes or conduits to settling basins must be no less than 0.5 feet nor greater than 1.5 feet per second.

Subp. 5. **Baffling; other designs.** Baffling may be used to provide flocculation only after the supplier consults with the commissioner and receives the commissioner's approval. The design must maintain the velocities and flows set forth in this subpart.

**Statutory Authority:** *MS s 144.383*

**History:** *15 SR 1842*

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