

# Supply chain shortages affecting proprietary UV disinfection devices

## Guidance for working through issues in accordance with Minnesota Rules

The Minnesota Pollution Control Agency (MPCA) is aware of current supply chain shortages affecting proprietary UV (ultraviolet) disinfection devices for use in advanced (Type IV) subsurface sewage treatment systems (SSTS). These shortages have the potential to affect both existing installed Type IV SSTS, as well as newly proposed Type IV SSTS registered with proprietary UV disinfection technology.

The following guidance is meant to outline how existing rules may address the immediate concerns for these systems. The MPCA will continue to monitor the situation and work with product manufacturers employing these products to determine if a long-term solution is necessary.

As always, local ordinance may be more restrictive than Minn. R. chs. 7080-83. As such, applicable local requirements must be met.

### For existing Type IV SSTS installed with affected UV disinfection technology

1. Service providers who are actively monitoring these systems will determine whether the existing UV disinfection device requires replacement components. If so, they will attempt to utilize components specified in the systems registration.
2. If unable to obtain replacement registered components, they will work with an intermediate/advanced designer for an alternate UV disinfection device with similar specifications. The designer will obtain a certified statement from a Minnesota licensed professional engineer that the alternate UV disinfection system is equivalent to the original and will meet performance outcomes outlined in the system's original design. An updated management plan reflecting the alternate UV disinfection system is created at this time.
3. The intermediate/advanced designer submits all documentation to the local governmental unit (LGU) for approval. If approved, the system is further managed under an operating permit.
4. A licensed service provider business performs routine maintenance as required per the updated management plan and operating permit for the system.

### For new Type IV SSTS registered with affected UV disinfection technology

1. It is the responsibility of an intermediate/advanced design business to verify all components of registered Type IV systems are available when creating a design for a new system employing affected UV disinfection technology.
2. If the designer chooses to utilize a registered treatment technology but employ a UV disinfection device not included on that system's registration, then they must propose the system as a Type V in accordance with Minn. R. 7080.2400. Type V systems require a certified statement from a Minnesota licensed professional engineer verifying requirements of Minn. R. 7080.2400 will be met.
3. All other state and local requirements must be met through the standard permitting process in the Type V system design. This includes being operated under an approved management plan and regulated under an operating permit issued by the LGU.