Significant Deficiencies

For

Community (CWS) & Non-Transient, Non-Community (NTNC) PWS

Source

- 1. **Source water quality**: Source water must be of consistent quality. Source water quality parameters must be within the effective range of available treatment options.
- 2. **Source water quantity/capacity**: Source(s) sized to meet the appropriate level of demand. (particularly important to pressure tank systems).
- 3. **Location of source facilities:** Water source must be located away (At least 100ft) from pollution sources capable of contaminating the well or spring box. Water source must not be susceptible to flooding.
- 4. **Condition of source facilities:** Source facilities must be of sufficient design, size and operating condition to provide a reliable, adequate and consistent flow of water.
- 5. **Transmission of source water:** Consumer connections to source water transmission lines prior to treatment are not allowed.
- 6. **Improperly constructed well:** (ex. not properly grouted)
 - Well not grouted according to MSDH requirements
 - Well casing and/or well screen is compromised
- 7. Significant Source Deficiency not otherwise specified: As determined and documented by field staff

Treatment

- 1. **Capacity of treatment facilities:** Treatment facilities must be of sufficient design and size adequately to treat the quantity of water required.
- 2. **Function and condition of treatment facilities:** Treatment facilities must be of sufficient condition and operation to produce water meeting primary SDWA requirements.
- 3. **Disinfection:** Systems claiming 4-log inactivation of viruses under the groundwater rule must have redundant chlorination equipment.
- 4. **In-plant cross connections:** Air gaps or vacuum breakers required on chemical make-up lines or other potential cross connections associated with the treatment facility or water source.
- 5. **Significant Treatment Deficiency not otherwise specified:** As determined and documented by field staff

Distribution

- 1. **Cross connection control:** System must implement and maintain a cross connection control policy as defined by state regulations.
- 2. **Pressure:** System must maintain pressure within range of 20 psi-80 psi. Pressure gauge or logger data indicating sustained low pressures on the distribution main shall be collected to prove pressure problems exist and warrant significant deficiency status.
- 3. **Significant Distribution Deficiency not otherwise specified:** As determined and documented by field staff

Water Storage

- 1. **Capacity and design of storage tanks:** Water system storage must be adequate to meet customer demands
- 2. Condition of storage tanks: Water storage tanks must be of sufficient operating condition.
- 3. **Significant Water Storage Deficiency not otherwise specified:** As determined and documented by field staff

Pumps and controls

- 1. **Capacity of pumps:** High service pumps must be sized to meet projected peak demand and be in operable condition
- 2. **Pump station condition:** facilities must be in operating condition
- 3. **Automatic controls:** automatic controls are required for source facility, treatment system, and pumping stations. Must be maintained in operable condition.
- 4. **Significant Pumps/Controls Deficiency not otherwise specified:** As determined and documented by field staff

Monitoring/reporting/data reporting

- 1. **Monitoring plans:** System must collect required SDWA samples according to appropriate sampling plan
- 2. **MOR:** 4-log systems are required to maintain the MOR worksheet/report provided by State recording the lowest daily chlorine reading according to requirements of GWR.
- 3. **Operations Record:** applicable water quality parameters must be recorded on routine basis as defined the Public Water System Operations Manual including disinfection residuals and any other modified water quality parameters.
- 4. **Significant MRD Deficiency not otherwise specified:** As determined and documented by field staff

Management/Operation

- 1. **Water system staffing:** Facilities must be visited by operator or representative according to schedule defined the Public Water System Operations Manual.
- 2. **Sanitary conditions**: Are they maintained at all water system facilities?
- 3. **Site security:** Adequate security for the protection of water system source(s), treatment, storage and pumping facilities.
- 4. Inadequate follow-up on previous deficiencies

Compliance with State requirements

- 1. **Competency of operators:** System may not operate more than 180 consecutive days without operator certified by the department holding appropriate classification operating license.
- 2. **Lack of Operational Oversight:** System must perform minimum checks as defined in the Public Water System Operation Manual.