

**Mississippi Department of Health
Bureau of Public Water Supply
Capacity Development Rating Form Assessment Criteria
01 July 2022 - 30 June 2023**

Technical Capacity

- T1 Does the water system have any significant deficiencies?**
- T2 (1) Was the water treatment process functioning properly?** Corrosion control plants: within - 0.5 of target pH (approximately 8.4, Langlier Index, or 7.2-7.8 if adding phosphate for corrosion AND minimum phosphate residual of 0.5 mg/L as P or 1.5 mg/L as PO₄ (most test kits)), Iron removal plants: finished water Fe < 0.3 mg/l, Chlorine: Adequate at plant to provide residual throughout system, spot checked on system, Systems adjusting Fluoride: 0.7 - 1.3 mg/l with optimum dose at 0.7 mg/l.
- T2 (2) Was needed water system equipment in place and functioning properly at the time of survey?** Adequate security: locked fence around wells/treatment plant/tank (6' or 5' + barbed wire at top), locked hatches on water storage tanks (operator verifies), Security Vulnerability Self-Assessment and Emergency Response Plan, both updated annually. Required equipment in place (i.e., phosphate and/or fluoride feeders on all wells if required), major components sized correctly if affects water quality or quantity, major components working at time of inspection unless provisions for repairs made. Must be noted on inspection report.
- T2 (3) Were records available to the regional engineer clearly showing that all water storage tanks have been inspected and cleaned or painted (if needed) within the past 5 years?** Maintenance and painting contracts, tank inspection reports, operator can inspect own tank if he/she writes a report and/or takes pictures, painted if needed.
- T3 (1) Was the certified waterworks operator or his/her authorized representative present for survey?** Operator or representative must be present unless emergency; operator of record shouldn't miss two in a row.
- T3 (2) Was PWS Operations record up to date and properly maintained?** Operations record: Cl₂ recorded as required, pH, Fe, Fluoride, and phosphate where applicable. Did logbook indicate the minimum required operator presence was performed based on system classification.
- T3 (3) Was the water system properly maintained at the time of survey?** Grass cut, packing not leaking excessively, plant presentable, etc.
- T3 (4) Did the operator/system personnel satisfactorily demonstrate to the regional engineer that he/she could fully perform all water quality tests required to properly operate this water system?** Must have appropriate test kits, fresh reagents, and able to perform tests (where applicable: chlorine, pH, iron, fluoride, phosphate). Regional engineer may perform tests to verify operator's results. Chlorine test must be performed by operator at all inspections.
- T4 (1) Does water system routinely track water production and were acceptable records available for review?** Requires master meter or annual pump test with run time. Must show calculating water production at least quarterly.
- T4 (2) Is the water system overloaded?** Cannot exceed MSDH design capacity, consecutive systems overloaded if supplier overloaded or based on hydraulic calculations or pressure recording.

- T4 (3) Was there any indication that the water system is/has been experiencing low pressure in any part(s) of the distribution system?** Documented by hydraulics or pressure recording, or verified by operator. Must be documented on inspection report
- T4 (4) Are well pumping tests performed routinely?** Must have pump tests at least every two years on all wells that are greater than three (3) years old, OR pump tests every year on wells at systems with design capacity exceeding 80%
- T5 (1) Does the water system have the ability to provide water during power outages?** Credit given for generators, can give credit for emergency tie-ins w/ system w/ generator if hydraulics work, credit given for right angle drive if motor attached during survey, may be required to operate during inspection. Credit given for generator on trailer if quick-connect, systems with elevated storage may share generator on trailer, must have prior agreement. Credit not given for renting generator w/o contract. SYSTEM MAY PROVIDE BOTTLED WATER IF INCLUDED AS PART OF A PUBLISHED EMERGENCY PLAN. Service logs may be checked at time of survey.
- T5 (2) Does the water system have a usable backup source of water?**

Managerial Capacity

- M1 Were all SDWA required records maintained in logical and orderly manner and available for review?** In one location, sample results, MSDH correspondence, copy of CCR report, etc.
- M2 Have acceptable written policies and procedures for operating this water system been formally adopted and available for review?** Must have water users agreement (connection fees, late charges, deposits, wastewater requirements) and subdivision/line extension policy (written procedure requiring developer/system obtain MSDH approval before construction begins) and either By-laws or Job Description for Employees (employee handbook), plus at least two of the following: Emergency or contingency plan (chain of command, phone numbers, etc.), Flushing program (flushing schedule w/ records), Fire hydrant policy (maintenance schedule, flow tests, agreement w/ fire dept.), Updated distribution map (can be updated by operator), or SARA Tier II (report of hazardous chemicals, quantity, location provided to local and state fire, law and EOC's).
- M3 Has the water system had any SDWA violations since the last Capacity Assessment?** System and Regional Engineer's records
- M4 Has the water system developed a preventative maintenance schedule and was this plan available for review?** Maintenance schedule for: wells (including annual pump tests), service pumps, tank inspections, with recommendations and corrective action taken. Documentation must be available for review.
- M5 (1) Does the water system have an effective cross connection program in compliance with MSDH regulations?** Shall include the following: Cross connection policy, records of backflow preventers installed on the system, current test results for each backflow preventer on system.
- M5 (2) Was a copy of the MDH approved bacti sample site plan and lead and copper sample site plan available for review and bacti results show site plan is followed?** Copy of sampling site plans available and bacti results show plan is being followed.