MISSISSIPPI STATE DEPARTMENT OF HEALTH

REPORT OF INSPECTION OF DRINKING WATER SUPPLY

PWS: 0640014 **Class:** C

An inspection of the SMITHS CROSSING WATER ASSN water supply in SIMPSON county was made on 10/29/2025. Present at the time of inspection was CHRISTOPHER S WOMACK, OPERATOR; WRITER. Official JOHN KILPATRICK Address PO BOX 956 MAGEE MS 39111 W.W. Operator CHRISTOPHER S WOMACK Address 613 GOLF COURSE RD MENDENHALL MS 39114 No. Connections 1652 No. Meters ___ Population Served 4367 Field Chemical Analysis: pH Cl2(free) ___ Cl2(total) ___ H2S N/A Iron ___ Fluoride ___ Point of Sampling DISTRIBUTION Water Rates ___ This inspection included a sanitary survey for compliance with the Ground Water Rule.

COMMENTS

Technical: 51/51 Managerial: 33/33 Financial: 16/16

OVERALL CAPACITY RATING: 100 / 100

1. This inspection serves as the Sanitary Survey as required under the Ground Water Rule. The following aspects of the water system were evaluated: source, treatment, distribution system, finished water storage, pump/pump facilities/controls, monitoring/reporting/data verification, water system management/operation, and operator compliance. No significant deficiencies were observed during the survey.

2. The target pH for this system is 9.0 as long as soda ash is used for corrosion control. At the time of the inspection, the chemical analysis of the finished water was as follows:
   Plant 1: pH = 8.8
   free chlorine = 1.7 mg/L
   Plant 2: pH = 8.8
   free chlorine = 1.8 mg/L
   Plant 5: pH = 8.7
   free chlorine = 1.7 mg/L
   Plant 6: pH = 8.9
   free chlorine = 1.5 mg/L
   Plant 3: pH = 8.8
   free chlorine = 1.8 mg/L
   The system should maintain the pH between +/- 0.5 of the target at all times.

3. The system has entered into a tank maintenance contract since the last inspection.

4. The system has received an ARPA grant and is in the process of drilling a new well at Plant 3.

5. The system has temporarily stopped feeding fluoride due to the rising cost and product unavailability.

6. As a reminder, the system should have a completed, working Asset Management Plan for review during the annual inspection.

7. Whenever system pressure is lost, even for brief periods of time, contaminants may be introduced to the system through back-flow or back-siphonage. When this occurs, system officials should notify all customers in the affected area to boil their drinking water until clear bacteriological samples have been obtained.

8. All dead-end water lines should be flushed on a routine schedule to clear the lines of sediment and stagnant water.

9. When repairs are made on the water distribution system, all lines affected should be properly chlorinated and flushed before they are placed back in service.

10. Records that are required in accordance with the Safe Drinking Water Act include:
    - Bacti Site Plan with map & sample results - 5 yrs.
    - Other water quality analysis - 10 yrs.
    (THMs, HAA5s, nitrates, inorganics, VOCs, etc.)
    - Lead and Copper Site Plan & sample results - 12 yrs.
    - Inspection Reports - 10 yrs.
    - Annual Report - 3 yrs.
    - Operator's Logbook - 5 yrs.
    - Actions taken by the system to correct violations - 3 yrs.
    - Records concerning a variance or exemption - 5 yrs.
    - All other MSDH correspondence - 3 yrs.

Completed by Colleen Cook on 11/04/2025.

Reviewed by Wendy Ferrill, P.E. on 11/04/2025.

If you have any questions, please call (601) 576-7518.

pc:

JOHN KILPATRICK, OFFICIAL
CHRISTOPHER S WOMACK, OPERATOR

MISSISSIPPI STATE DEPARTMENT OF HEALTH

Bureau of Public Water Supply

FY 2026 Public Water System Capacity Assessment Form

Standard Form

PWS ID#	PUBLIC WATER SYSTEM
0640014	SMITHS CROSSING WATER ASSN
SURVEY DATE	COUNTY
10-29-2025	SIMPSON
CONNECTIONS	POPULATION
1652	4367
CLASS	CERTIFIED WATERWORKS OPERATOR
C	CHRISTOPHER S WOMACK

A+

100

Overall Score

Technical	Managerial	Financial
51/51	33/33	16/16

Technical Capacity Assessment — 51 of 51 points

T1	Does the water system have any significant deficiencies? ○ Y ◉ N	Points **7/7**
T2	Was the water treatment process functioning properly? ◉ Y ○ N	Points **4/4**
T3	Was needed water system equipment in place and functioning properly at the time of survey? ◉ Y ○ N	Points **3/3**
T4	Were records available to the RE clearly showing that all water storage tanks have been inspected and cleaned or painted (if needed) within the past 5 years? ◉ Y ○ N ○ NA	Points **3/3**
T5	Was the certified waterworks operator or his/her authorized rep present for survey? ◉ Y ○ N	Points **3/3**
T6	Was PWS Operations record up to date and properly maintained? ◉ Y ○ N	Points **3/3**
T7	Was the water system properly maintained at the time of survey? ◉ Y ○ N	Points **3/3**
T8	Does the system have adequate capabilty for testing the water quality of the system and could operator personnel perform all water quality tests required to properly operate this water system? ◉ Y ○ N	Points **2/2**
T9	Does water system routinely track water loss and were acceptable records available for review? ◉ Y ○ N	Points **3/3**

T10	Is the water system overloaded? Cannot exceed MSDH design capacity, consecutive systems overloaded if supplier overloaded or based on hydraulic calculations or pressure recording. ○ Y ◉ N	Points **3/3**
T11	Was there any indication that the water system is/has been experiencing low pressure in any part(s) of the distribution system? ○ Y ◉ N	Points **3/3**
T12	Are well pumping tests performed routinely? ◉ Y ○ N ○ NA	Points **3/3**
T13	Does the water system have the ability to provide water during power outages? ◉ Y ○ N	Points **3/3**
T14	Does the water system have a usable backup source of water? ◉ Y ○ N	Points **3/3**
T15	For Groundwater systems – can the water system meet maximum daily demands with the largest producing source/ treatment facility out of service? OR For Surface Water systems – Can the water system meet maximum daily demands based on 1 in 50-year drought calculations or the extreme drought of record? ◉ Y ○ N ○ NA	Points **3/3**
T16	Does the system have a functioning control system for facility operations? (SCADA, Automatic Controls, etc.) ◉ Y ○ N ○ NA	Points **2/2**

Managerial Capacity Assessment — 33 of 33 points

M1	Does the PWS maintain or can the system access, via the PWS Portal, all SDWA required records? (Physical records in logical and orderly manner?) ● Y ○ N	Points **3/3**
M2	Have acceptable written policies and procedures for operating this water system been formally adopted and available for review? ● Y ○ N	Points **3/3**
M3	Have all Board Members (in office more than 12 months) completed Board Member Training? ● Y ○ N ○ NA	Points **3/3**
M4	Does the Board meet monthly and were minutes of Board meetings available for review? ● Y ○ N ○ NA	Points **2/2**
M5	Has the water system had any SDWA violations since the last Capacity Assessment? ○ Y ● N	Points **6/6**
M6	Has the water system developed or is in the process of developing its asset management plan to support its long-range improvements plan and were these plans available for review during the survey? ● Y ○ N	Points **3/3**
M7	Does the water system have an effective cross connection program in compliance with MSDH regulations? ● Y ○ N	Points **2/2**

M8	Were copies of the MSDH approved sample site plans (RTCR, LCR, and DPB) available for review? Do results show site plans are being followed? ● Y ○ N	Points **3/3**
M9	Does the system keep records of all customer complaints? ● Y ○ N	Points **2/2**
M10	Does the system have an adequate backup plan for staffing to ensure that vital operational action are covered? ● Y ○ N	Points **2/2**
M11	Does the System have a up to date Security Vulnerability Analysis or Risk and Resilience Assessment in place and available for review? ● Y ○ N	Points **2/2**
M12	Does the System have an up to date Emergency Response Plan available for review at the time of inspection? ● Y ○ N	Points **2/2**

Financial Capacity Assessment — 16 of 16 points

F1	Has the water system raised water rates in the past 3 years? ● Y ○ N	Points **3/3**
F2	Has the water system performed a rate study within the past 5 years ? ● Y ○ N	Points **2/2**
F3	If the rate study was performed, did the system act upon its recommendations? ● Y ○ N ○ NA	Points **2/2**
F4	Is the water system following an official cut-off policy? ● Y ○ N	Points **3/3**
F5	Was a copy of system's adopted annual budget available for review and does financial accounting system clearly and accurately track receipts and expenditures? ● Y ○ N	Points **2/2**
F6	Was the latest financial report/audit report available for review? ● Y ○ N	Points **2/2**
F7	Does the latest report show that receipts exceed expenditures? Excluding out of pocket for major improvements or for Municipal govts - Are the water and sewer fund accounts separate from other accounts? ● Y ○ N	Points **2/2**

Completed by Colleen Cook on 11/04/2025

Reviewed by Wendy Ferrill, P.E. on 11/04/2025

MISSISSIPPI DEPARTMENT OF HEALTH
BUREAU OF PUBLIC WATER SUPPLY
DESIGN CAPACITY SHEET

System: **SMITHS CROSSING WATER ASSN**
ID: **0640014** Class: **C** County: **SIMPSON**

Date Completed: **11/04/2025**
Connections - Actual: **1652** Equivalent: **1652**
Design Capacity: **3966** Percent Design Capacity: **1652/3966 = 41.7%**

MAIN SYSTEM (served by plants # 1,2,3 and 6):

Plant # 1:
Well Capacity = well 1 = 368 gpm
Treatment Capacity (aerator) = 225 gpm
Clearwell Capacity = 11,500 gallons
Service Pump Capacity = 150 + 150 = 300 gpm
Usable Service Pump Capacity = Limiting Factor + Clearwell Volume / 200
= 225 + 11,500 / 200 = 283 gpm

Plant # 2:
Well Capacity = well 2 = 185 gpm
Treatment Capacity (aerator) = 450 gpm
Clearwell Capacity = 14,000 gallons
Service Pump Capacity = 450 gpm
Usable Service Pump Capacity = Limiting Factor + Clearwell Volume / 200
= 185 + 14,000 / 200 = 255 gpm

Plant # 3:
Well Capacity = well 3 = 385 gpm
Treatment Capacity (aerator) = 300 gpm
Clearwell Capacity = 9,200 gallons
Service Pump Capacity = 150 + 150 = 300 gpm
Usable Service Pump Capacity = Service Pumps are Limiting Factor = 300 gpm

Plant # 6:
Well Capacity = well 6 = 420 gpm
Treatment Capacity (aerator) = 500 gpm
Clearwell Capacity = 23,000 gallons
Service Pump Capacity = 350 + 350 = 700 gpm
Usable Service Pump Capacity = Limiting Factor + Clearwell Volume / 200
= 420 + 23,000 / 200 = 535 gpm

Main System Usable Service Pump Capacity = Plant #1 + Plant #2 + Plant #3 + Plant #6
= 283 + 255 + 300 + 535 = 1,373 gpm

Main System Elevated Storage = 75,000 + 100,000 = 175,000 gallons

Main System Design Capacity = 1,373 + 175,000 / 200 = 2,248 gpm

Number of Connections = 1,471

% Capacity = (Equivalent Connections / Design Capacity) * 100
= (1,471 / 2,248) * 100 = 65%

PLANT # 5 SYSTEM:

Well Capacity = well 5 = 283 gpm
Treatment Capacity (aerator) = 300 gpm
Clearwell Capacity = 12,000 gallons

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DESIGN CAPACITY SHEET

SMITHS CROSSING WATER ASSN 11/04/2025

Service Pump Capacity = 200 + 200 = 400 gpm
Usable Service Pump Capacity = Limiting Factor + Clearwell Volume / 200
= 283 + 12,000 / 200 = 343 gpm

Design Capacity = Usable Service Pump Capacity + Elevated Storage / 200
= 343 + 75,000 / 200 = 718 gpm

Number of Connections = 181

% Capacity = (Equivalent Connections / Design Capacity) * 100
= (181 / 718) * 100 = 25%

WHOLE SYSTEM (Both systems combined):
Whole System Design Capacity = Main System + Plant # 5 System
= 2,248 + 718 = 3,966 gpm

Number of Connections = 1,652

% Capacity = (Equivalent Connections / Design Capacity) * 100
= (1,652 / 3,966) * 100 = 41.7%

Calculations for T15:
Largest Capacity Well = Well 06 = 420 gpm
Main System Pump Capacity without Well 06 = 283 + 255 + 300 = 838 gpm
Main System Design Capcaity without Well 06 = 838 + 175,000 / 200 = 1,713 gpm
Whole System Design Capacity = 1,713 + 718 = 2,431 gpm
% Capacity without Well 06 = (1,652 / 2,431) * 100 = 68%

Therefore, the System receives credit for T15.