



MISSISSIPPI STATE DEPARTMENT OF HEALTH

REPORT OF INSPECTION OF DRINKING WATER SUPPLY

PWS: 0610008 **Class:** D

An inspection of the FANNIN WATER ASSN-NORTH water supply in RANKIN county was made on 05/12/2023. Present at the time of inspection was ANDREW H BOYD, OPERATOR; WRITER. Official JAMES GOULD Address 2653 HWY 471 BRANDON MS 39047 W.W. Operator ANDREW H BOYD Address P O BOX 363 SANDHILL MS 39161 No. Connections 2689 No. Meters ____ Population Served 7099 Field Chemical Analysis: pH ____ Cl₂(free) ____ Cl₂(total) ____ H₂S N/A Iron ____ Fluoride ____ Point of Sampling DISTRIBUTION Water Rates ____

COMMENTS

Technical: 5 Managerial: 4 Financial: 5

OVERALL CAPACITY RATING: 4.7 / 5.0

1. No significant deficiencies were identified.
2. Adequate chlorine residual was found throughout the distribution system and required SDWA records were available for review and well organized. Chlorine residual is checked and recorded as required. The following field chlorine readings were observed: booster station- 0.5 mg/l free residual.
3. Tank inspections are due before the next inspection.
4. This system was issued a violation on January 6, 2023 for failure to submit an annual report within the time specified.
5. Fluoride feed equipment has not been put online.
6. We recommend system officials consider an emergency connection with a neighboring system.
7. A meter replacement program is in place.

8. Results from the 2022 pumping test were provided during the inspection. In order to continue to receive credit for T4, pump tests must be conducted on the wells at least once every two years. For systems over 80% of design capacity, pump tests are required each year.
9. Well 01 is used as standby only. This well will remain on active inventory as long as chlorination equipment is present but is not included in the design calculation since it cannot run with well 04 running. This well should be routinely pumped.
10. We recommend chlorine analyzers (or vacuum analyzers) be considered.
11. The Security Vulnerability Self-Assessment and Emergency Response Plan must be updated annually. An updated copy was available for review.

Completed by Greg Caraway, P.E. on 05/15/2023.

Reviewed by Ralph Hayes, P.E. on 05/17/2023.

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

pc:

JAMES GOULD, OFFICIAL
ANDREW H BOYD, OPERATOR

Mississippi State Department of Health Bureau of Public Water Supply

FY 2023 Public Water System Capacity Assessment Form

NOTE: This form must be completed whenever a routine sanitary survey of a public water system is conducted by a regional engineer of the Bureau of Public Water Supply

PWS ID#: 0610008 Class: D Survey Date: 05-12-2023 County: RANKIN
Public Water System: FANNIN WATER ASSN-NORTH Conn: 2689
Certified Waterworks Operator: ANDREW H BOYD Pop: 7099

CAPACITY RATING DETERMINATION

Technical (T) Capacity Rating: [5] Managerial (M) Capacity Rating [4] Financial (F) Capacity Rating [5]

$$\text{Capacity Rating} = \frac{T + M + F}{3} = \frac{14}{3} = 4.7$$

Overall Capacity Rating = 4.7

Completed by Greg Caraway, P.E. on 05/15/2023

Reviewed by Ralph Hayes, P.E. on 05/17/2023

Comments: _____

Technical Capacity Assessment	Point Scale	Point Award
[T1] Does the water system have any significant deficiencies? [<u>Y</u> <u>N</u>]	N - 1pt. Y - 0pt.	1
[T2] 1) Was the water treatment process functioning properly? [<u>Y</u> <u>N</u>] (i.e. Is pH, iron, chlorine, fluoride, etc. within acceptable range?) 2) Was needed water system equipment in place and functioning properly at the time of survey? [<u>Y</u> <u>N</u>] (NOTE: Equipment deficiencies must be identified in survey report.) 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? [<u>Y</u> <u>N</u> <u>NA</u>] (NOTE: All YESs required to receive point)	All Y - 1 pt. Else - 0 pt.	1
[T3] 1) Was the certified waterworks operator or his/her authorized representative present for the survey? [<u>Y</u> <u>N</u>] 2) Was PWS Operations record up to date and properly maintained? [<u>Y</u> <u>N</u>] (Are minimum days being met based on system classification) 3) Was the water system properly maintained at the time of survey? [<u>Y</u> <u>N</u>] 4) Did 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? [<u>Y</u> <u>N</u>] (NOTE: All YESs required to receive point)	All Y - 1 pt. Else - 0 pt.	1
[T4] 1) Does water system routinely track water loss and were acceptable record available for review? [<u>Y</u> <u>N</u>] 2) Is water system overloaded? (i.e. serving customers in excess of MSDH approved design capacity)? [<u>Y</u> <u>N</u>] 3) Was there any indication that the water system is/has been experiencing pressure problems in any part(s) of the distribution system? [<u>Y</u> <u>N</u>] (based on operator information, customer complaints, MSDH records, other information) 4) Are well pumping tests performed routinely? [<u>Y</u> <u>N</u> <u>NA</u>] (NOTE: YES FOR #1 & YES OR N/A FOR #4 AND NOs FOR #2 & #3 required to receive point)	1)Y - pt. 2)N - pt. 3)N - pt. 4)Y - pt.	1
[T5] 1) Does the water system have the ability to provide water during power outages? (i.e. generator, emergency tie-ins, etc.) [<u>Y</u> <u>N</u>] 2) Does the water system have a usable backup source of water? [<u>Y</u> <u>N</u>] (NOTE: Must be documented on survey report)	All Y - 1 pt. Else - 0 pt.	1
TECHNICAL CAPACITY RATING = [<u>5</u>] (Total Points)		

Managerial Capacity Assessment	Point Scale	Point Award
[M1] Were all SDWA required records maintained in a logical and orderly manner and available for review by the regional engineer during the survey? <u>(Y)N</u>	Y - 1pt. N - 0pt.	1
[M2] 1) Have acceptable written policies and procedures for operating this water system been formally adopted and were these policies available for review during the survey? <u>(Y)N</u> 2) Have all board members (in office more than 12 months) completed Board Member Training? <u>(Y)N NA</u> 3) Does the Board of Directors meet monthly and were minutes of Board meetings available for review during the survey? <u>(Y)N NA</u> (NOTE: Quarterly meetings allowed if system has an officially designated full time manager) (NOTE: ALL YESs or NAs required to receive point. NA - Not Applicable)	All Y - 1 pt. Else - 0 pt.	1
[M3] Has the water system had any SDWA violations since the last Capacity Assessment? <u>(Y)N</u>	N - 1pt. Y - 0pt.	0
[M4] Has the water system developed a long range improvements plan and was this plan available for review during the survey? <u>(Y)N</u>	Y - 1pt. N - 0pt.	1
[M5] 1) Does the water system have an effective cross connection control program in compliance with MSDH regulations? <u>(Y)N</u> 2) Was a copy of the MSDH approved bacti site plan and lead/copper site plan available for review during the survey and do the bacti results clearly show that this approved plan is being followed? <u>(Y)N</u> (NOTE: All YESs required to receive point)	All Y - 1 pt. Else - 0 pt.	1
MANAGERIAL CAPACITY RATING = [<u>4</u>] (Total Points)		

Financial Capacity Assessment	Point Scale	Point Award
[F1] Has the water system raised water rates in the past 5 years? <u>(Y)N</u> (NOTE: Point may be awarded if the water system provides acceptable financial documentation clearly showing that a rate increase is not needed, i.e. revenue has consistently exceeded expenditures by at least 10%, etc.)	Y - 1pt. N - 0pt.	1
[F2] Does the water system have an officially adopted policy requiring that water rates be routinely reviewed and adjusted as appropriate and was this policy available for review during the survey? <u>(Y)N</u>	Y - 1pt. N - 0pt.	1
[F3] Does the water system have an officially adopted cut-off policy for customers who do not pay their water bills, was a copy of this policy available for review by the regional engineer, and do system records (cut-off lists, etc.) clearly show that the water system effectively implements this cut-off policy? <u>(Y)N</u>	Y - 1pt. N - 0pt.	1
[F4] Was a copy of the water system's officially adopted annual budget available for review by the regional engineer and does the water system's financial accounting system clearly and accurately track the expenditure and receipt of funds? <u>(Y)N</u>	Y - 1pt. N - 0pt.	1
[F5 - Municipal Systems] 1) Was a copy of the latest audit report available for review at the time of the survey? <u>[Y]N</u> 2) Does this audit report clearly show that water and sewer fund account(s) are maintained separately from all other municipal accounts? <u>[Y]N</u> (NOTE: Yes answer to all questions required to receive point.)	All Y - 1 pt. Else - 0 pt.	
[F5 - Rural Systems] 1) Was the latest financial report / audit report available for review? <u>(Y)N</u> 2) Does the latest financial report show that receipts exceeded expenditures? <u>(Y)N</u> (NOTE: Yes answer to both questions required to receive point)	All Y - 1 pt. Else - 0 pt.	1
FINANCIAL CAPACITY RATING = [<u>5</u>] (Total Points)		



MISSISSIPPI STATE DEPARTMENT OF HEALTH

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

System: **FANNIN WATER ASSN-NORTH**
ID: **0610008** Class: **D** County: **RANKIN**

Date Completed: **05/15/2023**
Connections - Actual: **2689** Equivalent: **2654**
Design Capacity: **4155** Percent Design Capacity: **2654/4155 = 63.9%**

Source Capacity

Well 1 - 278 gpm (standby only, not included in calculation)
Well 2 - 352 gpm
Well 3 - 409 gpm
Well 4 - 486 gpm
Well 5 - 553 gpm

total = 1800 gpm April 2022 pump test

(well 01 and well 04 cannot run at the same time due to proximity to each other)

Storage Capacity

157,000 Standpipe 1 acts as elevated storage
157,000 Standpipe 2 acts as elevated storage
157,000 Standpipe 3 acts as elevated storage

Design Capacity

= Total Well Capacity + Storage Capacity/200
= 1800 + 471,000/200
= 4155 gpm

Total Design Capacity

= 4155 Connections

NOTE: THIS SYSTEM HAS TWO BOOSTER STATION THAT SERVE 35 CUSTOMERS. THIS BOOSTER STATION IS NOT OVERLOADED AND CREDIT FOR THE BOOSTER STATIONS GIVEN.

Current Number of Connections 2689 Connections
Booster Station Connections - 35 Connections
Net Total Connections = 2654 Connections

All users reported as residential

**MISSISSIPPI STATE DEPARTMENT OF HEALTH
DIVISION OF WATER SUPPLY
PUBLIC WATER SUPPLY – MASTER DATA SHEET**

Name of Supply Fannin Water Association **Owner** Association

County Rankin **Class** D **Date of Last Inspection** 12 May 2023

Supply Source: **Purchase** **Surface** **Ground** ☒ **Number of Wells** Four

GWR TYPE: Triggered **PWS ID:** 0610008 **Design Capacity** 485/4123

Well Data:

<u>Well ID NO.</u>	<u>Location</u>	<u>Year Const.</u>	<u>Cap. (GPM)</u>	<u>Pres.</u>	<u>Casing</u>	<u>Screen</u>	<u>Depth</u>	<u>Controls</u>
610008-01	Fannin Mart	1968	278	AT 35 psi	8"	4"	1202'	MANUAL
610008-02	South on 471	1980	352	AT 65 psi	10"	6"	1187'	AUTO
610008-03	Hwy 471 North	1998	409	AT 40 psi	12"	8"	1220'	AUTO
610008-04	Fannin Mart	2008	486	AT 40 psi	12	8"	1195'	AUTO
610008-05	Highway 471	2020	553	at 40 psi	12	8		AUTO

April 2022 pump test

generator at well 03, 04, 05

Treatment: **Iron** ☐ **Softening** ☐ **Corrosion** ☐ **Chlorine** ☒ **Fluoride** ☐

	<u>NO.</u>	<u>TYPE</u>	<u>CAPACITY</u>	<u>REMARKS</u>
Chlorinator	Well 02	Hydro	50 PPD @ 25	PPD w/ AS and scales
Chlorinator	Well 03	Hydro	50 PPD @ 30	PPD w/ AS and scales
Chlorinator	Well 04	Hydro	50 PPD @ 30	PPD w/ AS and scales
Chlorinator	Well 05	Advance	100 PPD @ 30	PPD w/ AS and scales

<u>Storage:</u>	<u>Location</u>	<u>Material</u>	<u>Capacity</u>	<u>Remarks</u>
Pressure	Hwy 471 South (well 02)	Steel	10,000 gallons	65-85 psi
Ground	Hwy 471	Steel	157,000 gallons	529' Elevation; 27' to OF Diameter = 30.77'; Height = 27.7'
Ground	Hwy 471	Steel	157,000 gallons	529' Elevation; 27' to OF Diameter = 30.77'; Height = 27.7'
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All ground tanks at well 03

Tanks inspected April 2018

Booster Stations:

<u>Location</u>	<u>Collector Tank</u>	<u>Pumps</u>	<u>Storage Tank</u>
Hwy 471 Fannin Mart (old)	system storage	two 150 gpm AT 80 psi	one 4000 gal pressure tank To serve proposed subdivision
Hwy 471 (new)	10,000 Ground Tank	two 100 gpm AT 70 psi	4000 gal pressure tank Serves 35 connections
32°26.634', 89° 56.189'	glass lined		