35

Arkansas Department of Health

Public Water Supply Sanitary Survey

Name of System Tontitown Waterworks PWS 566

County Washington

Date of Survey February 11, 2008

Survey By Jeff Sohl

Title Environmental Specialist

Public Water Supply Sanitary Survey

Arkansas Department of Health

Name of System: Tontitown Waterworks PWS #: 506

Address: PO Box 127 Tontitown, AR 72770

Manager: Robert Button License #: 05501D2 Telephone #:

Alternate Telephone #: Cell #: Fax #: E-mail Address:

Treatment Plant Supervisor: License #: Telephone #:

Distribution System Supervisor: Robert Button License #: 05501D2 Telephone #:

Number of Licensed Employees: 1 # of Treatment Licenses: # of Distribution Licenses: 1

Mayor/Chairman/President/Other: Joe Edgemon (H) Telephone #:

Address: (W) Telephone #:

# of Services: 893 %Metered: 100 Total Pop. Served: 2250 Retail Pop.Served: Consecutive Pop.Served:

Domestic: 699 # Commercial: 186 # Wholesale: # Industrial: # Irrigation: 8

Engineering District: 1 County Name: Washington County Code #: 72

Plumbing Inspector: Steve Sabo License #: IC1177

Plant Name & ID	Type of Plant	Construction Date	# of Sources	Type(s) of Source
Master Meter 2	Master Meter	1988	1	Surface Purchase
Master Meter 3	Master Meter	2000	1	Surface Purchase

Maximum System Capacity: 0.33 MGD (All Plants)

Total System Storage: 0 MG **Useable System Storage: 0 MG**

Production Figures								
System Segment / Plant Name & ID	Capacity (MGD)	Limiting Factor	Code	Maximum Demand (MGD)	Maximum Demand % Cap.	Average Demand (MGD)	Average Demand % Cap.	Population Served
Master Meter 2	0.167	Contract	8	0.168	100%	0.14	84%	2250
Master Meter 3	0.167	Contract	8	0.168	%	0.14	84%	
					%		%	
					%		%	
					%		%	
					%		%	
Primary System	0.33			0.33	%	0.28	%	2250
Consecutive Systems		PWS ID #	Status					
					%		%	
					%		%	
					%		%	
					%		%	
					%		%	
					%		%	

Industrial Demand	
Unaccounted-for Water	28 %

(Status: P – Primary, E – Emergency, I – Intermittent, O – Other)

☐ Estimated X Calculated

Identify Significant Deficiencies:

Give brief evaluation of system condition and operation: Tontitown has no storage for the system. 28% water loss was calculated using the information provided that they billed out 6.245 million gallons in water used and purchased 8.671 million gallons the month previous to the survey. Tontitown needs to work on reducing the unaccounted for water percentage. Master Meter 1 is no longer in service.

Name of System: Tontitown Waterworks PWS #: 566

Purchase Source

Source Entity ID #: 301 Source:(#_1_of_2_)
PWS Source Name: Springdale Water
PWS ID #: 575 Maximum Purchase Agreement: 0.167 MGD

Yes	No	
X	☐	1. Are maximum purchase agreements adequate?
X	☐	2. Has the system been free from shortages of source in the past?
X	☐	3. Does source system have adequate emergency plan?
X	☐	4. Is source system's overall operation in accordance with the regulations?
☐	X	5. Is master meter read routinely and reading recorded?
X	☐	6. Is connection to source system adequate?
X	☐	7. Is connection to source system provided with adequate backflow prevention?

Comments: Springdale reads the meters and bills accordingly. Tontitown does not have a key to the vaults.

Source Entity ID #: 201 Source:(#_2_of_2_)
PWS Source Name: Springdale
PWS ID #: 575 Maximum Purchase Agreement: 0.167 MGD

Yes	No	
X	☐	1. Are maximum purchase agreements adequate?
X	☐	2. Has the system been free from shortages of source in the past?
	☐	3. Does source system have adequate emergency plan?
X	☐	4. Is source system's overall operation in accordance with the regulations?
☐	X	5. Is master meter read routinely and reading recorded?
X	☐	6. Is connection to source system adequate?
X	☐	7. Is connection to source system provided with adequate backflow prevention?

Comments:

Source Entity ID #: Source:(#___of___)
PWS Source Name:
PWS ID #: Maximum Purchase Agreement: MGD

Yes	No	
☐	☐	1. Are maximum purchase agreements adequate?
☐	☐	2. Has the system been free from shortages of source in the past?
☐	☐	3. Does source system have adequate emergency plan?
☐	☐	4. Is source system's overall operation in accordance with the regulations?
☐	☐	5. Is master meter read routinely and reading recorded?
☐	☐	6. Is connection to source system adequate?
☐	☐	7. Is connection to source system provided with adequate backflow prevention?

Comments:

Name of System: Tontitown Waterworks PWS # 566

Treatment Plant

(Page 1)

Plant:(# ___ of ___)

Plant ID # _____ Plant Name: _____

Plant Location: _____

(Give directions from major road/street or highway intersection.)

Purpose of Plant ☐ Surface_____ ☐ Iron/Manganese Removal/Control_____ ☐ Organic/DBP Removal_____
☐ Disinfection ☐ Fluoridation ☐ Corrosion Control ☐ Other_____

Treatment Processes (Provide System Flow Schematic & Locate Chemical Injection Points & Water Quality Monitoring Sites)

X No Treatment Provided

☐ Aeration: ☐ Cascade/Tray ☐ Forced/Induced Draft ☐ Pressure Approved Capacity _____MGD

☐ Disinfection / Oxidation Type: ☐ Pre ☐ Intermediate ☐ Final ☐ Breakpoint Chlorination ☐ Booster (Indicate on Flow Schematic)
☐ Cl_2 Gas ☐ Hypochlorite ☐ Ozone ☐ ClO_2 ☐ Chloramines ☐ UV ☐ $KMnO_4$
☐ Other_____

Location(s) for CT contact				
Plant Segment	**Type of Disinfectant Used**	**Disinfectant Injection Point**	**CT Monitoring Point**	**T_{10} Time @ Maximum Flow Rate (min.)**

☐ Rapid Mix: ☐ Hydraulic ☐ Mechanical ☐ Static # of units ____ Approved Capacity _____MGD
Volume: _____ Gal. Detention Time: ____sec. Dimensions (ft.): L _____ W _____ Dia. _____ D _____

☐ Reaction Tank: Volume _____ Gal. Detention Time: ____min. Dimensions (ft.): L _____ W _____ Dia. _____ D _____

☐ Flocculation: ☐ Hydraulic ☐ Mechanical Approved Capacity _____MGD

Treatment Train	Dimensions (ft.)				Volume (gal)	Theoretical Detention Time (min)	Flow-through Velocity (fpm)	# of Chambers
	L	W	Dia.	D				

☐ Sedimentation: ☐ Conventional ☐ Upflow ☐ Solids Contact Unit ☐ Contact Clarifier ☐ Other _____
☐ Tube/Plate Settlers-Area _____ft^2 Approved Capacity _____MGD

Treatment Train	Dimensions (ft.)				Volume (gal)	Theoretical Det. Time (min.)	Flow-through Velocity (fps)	Loading Rate (gpd/ft^2)	Weir Loading Rate (gpm/ft)
	L	W	Dia.	D					

Comments: _____

Name of System: Tanitown Waterworks PWS # 566

Monitoring, Reporting, and Data Verification

Laboratory Testing & Equipment				
Lab Tests	Frequency	Sample Location	Method	Make & Model #
Chlorine	Monthly	Bacti Sites	Color comparison	Hach CN67

Calibration Records					
	Calibration Frequency	Date Last Calibrated	Are Calibration Logs Available	Field Verification	
				ADH Results	System Results
Turbidimeters					
pH Meters					
Disinfectant Analyzers				0.6PPM	0.7PPM

Yes	No	N/A		
• X	☐		1.	**Are laboratory facilities, testing equipment, and procedures, accurate, adequate, and operable?**
X	☐		1.1	Are records of lab tests being maintained?
X	☐		1.2	Do reagents used have an unexpired shelf life?
☐	☐	X	1.3	Are continuous turbidimeters and recorders provided on each filter?
☐	☐	X	1.4	Is continuous chlorine analyzer and recorder provided on plant effluent?
X	☐		2.	Is all routine compliance monitoring up-to-date? (Check monitoring status report.)
X	☐		2.1	Are the proper numbers of bacti samples being collected? Number required? _____
☐	☐	X	2.2	For surface systems with conventional treatment, is raw water alkalinity being monitored?
☐	☐	X	2.3	For systems using chlorine dioxide, are daily entry point analysis for ClO_2 residual and Chlorite being collected and reported?
X	☐		3.	Is the system monitored according to ADH approved methods and sample site plan(s)? X Bacti ☐ CT X Disinfectant Residual ☐ THM ☐ HAA5 ☐ ClO_2 Residual Distribution System Samples (☐ N/A) ☐ Chlorite Distribution System Samples (☐ N/A) ☐ Other _____
X	☐	☐	4.	Is the system in compliance with the monitoring and reporting requirements of the Lead and Copper Rule as outline in their approved Optimal Corrosion Control and Treatment plan?
☐	☐	X	5.	Are fluoride check samples submitted monthly?
☐	☐	X	6.	Are daily fluoride analyses performed, results recorded, and submitted monthly?
• X	☐		7.	**Does the system accurately complete Monthly Operational Report forms?**
X	☐		7.1	Has the system submitted Monthly Operational Report forms on time?
X	☐		7.2	Does the system have the proper records on file and available for review? X Sanitary Surveys X Bacteriological and Chemical Analysis Reports ☐ Source Water Assessment Report X Sample Site Plans ☐ Optimal Corrosion Control and Treatment Plan for Lead & Copper Rule (X N/A) ☐ Disinfection Profile and Benchmark Report (X N/A) ☐ Individual Filter Monitoring Data (X N/A) ☐ Filter Profile Report (X N/A) ☐ Filter Self-Assessment Report (X N/A) ☐ CPE report (X N/A) X CCR ☐ Other _____

Comments: The operator was not available during the survey.

Name of System: Tontitown Waterworks PWS # 566

Distribution System

Yes	No		
• X	☐	1.	**Are pressures in all portions of the system maintained above 20 psi during peak demand?** **If no, give reason:** _____
• X	☐	2.	**Is a detectable disinfectant residual level maintained in all portions of the system?**
X	☐	3.	Is a sufficient number of valves provided, properly located, and are they accessible?
X	☐	3.1	Does the system have a valve exercise / replacement program?
		4.	What piping materials are used? (Estimate percentage) ____DI/CI 89PVC 1 Galvanized 10AC Other:_____
X	☐	5.	Has the distribution system been free of water quality problems?
X	☐	6.	Does the system have an adequate maintenance and flushing program?
X	☐	7.	Are mains and appurtenances properly flushed, disinfected and tested after repairs or extensions?
X	☐	8.	Is a licensed plumbing inspector available?
X	☐	9.	Does the system have a meter replacement program?
X	☐	10.	Does the system have a leak detection program?
X	☐	11.	Is the overall condition of the distribution system acceptable?

Comments: _____

Cross-Connection Control

Yes	No	N/A		
X	☐		1.	Does the system have an active Cross-Connection Control Program?
		☐	1.1	Who is responsible for the Cross Connection Control Program? Robert Button
X	☐		1.2	Does the governing body have an ordinance, by-law or written resolution specifically addressing cross connection control?
X	☐		1.3	Is the system requiring annual testing of backflow preventers and keeping records of the tests?
• X	☐		2.	**Is the system free of high-hazard unprotected cross-connections?** ☐ Treatment Plant ☐ Pumping Facilities ☐ Distribution
• X	☐	☐	3.	**Is a Cross-Connection Control Program being enforced for high-hazard services?**
X	☐	☐	3.1	Have all commercial and industrial customers been surveyed?

Comments: **Administrative Assistant, Rebecca Bennett stated that she is in charge of record keeping for the CCCP and has the water turned off at sites when the annual testing is not completed as required.**

Name of System: Tontitown Waterworks PWS # 566

System Operations & Management

Identify the management structure of water system.

X Mayor/Council ☐ Board of Directors ☐ Commission ☐ Other _____

MEMBERS NAME	TITLE
Joe Edgemon	Mayor
Art Penzo	Alderman
Henry Piazza	Alderman
Ken Robertson	Alderman
David Sbanotto	Alderman
Becky Alston	Alderman
Sonny Henshaw	Alderman

Yes	No		
☐	X	1.	Is a current (i.e. less than 10 years old) Long-Range Plan/Master Plan on file with ADH? ☐ Long Range Plan (Date _____) ☐ Master Plan (Date _____)
X	☐	2.	A written emergency plan is on file at the water system.
X	☐	3.	The emergency plan is up to date and contains the proper names, numbers, etc.
• X	☐	4.	**Management provides the necessary budget, personnel, security measures, maintenance or repair parts to meet regulatory requirements and provide for the production of an adequate quantity of safe drinking water.** ☐ **Adequate budget** ☐ **Sufficient / Qualified staff** ☐ **Adequate / Sufficient parts inventory** ☐ **Other** _____
X	☐	5.	Have all major modifications (since previous survey) been approved by ADH?
X	☐	6.	Are the systems records being maintained according with regulatory requirements? ☐ Maintenance and repair records ☐ System maps ☐ Operating reports
X	☐	7.	Is the maximum demand less than 80 percent of capacity (i.e. source, plant, pumping)? If no, discuss corrective actions. _____
X	☐	8.	If the system has greater than 15% unaccounted for water, are corrective actions being taken? Discuss corrective actions. (☐ N/A) _____
X	☐	9.	Has the system been free of any violations since the last survey? ☐ TCR ☐ MRDL ☐ IOC ☐ VOC ☐ SOC ☐ Radio-chemicals ☐ THM (☐ N/A) ☐ HAA5 (☐ N/A) ☐ Bromate (☐ N/A) ☐ Chlorite (☐ N/A) ☐ Combined filter turbidity (☐ N/A) ☐ Plant Effluent Disinfectant Residual (☐ N/A) ☐ CT ☐ Enhanced Coagulation – TOC removal (☐ N/A) ☐ Other _____
X	☐	10.	Is system's Disinfection By-Product levels less than 80% of the MCL and not trending upward significantly since the last survey? ☐ TTHM ☐ HAA5 ☐ Bromate (☐ N/A) ☐ Chlorite (☐ N/A)
		11.	What is the required license grade level for this system? Treatment _____ Distribution _____
X	☐	12.	Does system have a completed source water assessment?
X	☐	13.	Is source water assessment report on file and accessible to the public?

Comments: _____

Name of System: Tontitown Waterworks PWS # 566

Operator Certification

- X ☐ 1. **The operator(s) or responsible person(s) in charge of the treatment facility and/or distribution facilities have the required State certification.**
- ☐ X 2. Are all persons making individual judgements that affect water quality properly licensed?
- X ☐ 3. Does the system have a sufficient number of licensed staff to perform all water quality related duties?
- X ☐ 4. Are operators provided training in the proper use of safety equipment?

Operator	Title	License #
Robert Button	Chief Operator	05501D4

Comments: Rebecca Bennett is making decisions regarding the CCCP.

Contact Information

Emergency Contact Person: Mick Wagner Emergency Contact Phone Number: (479)790-3480

Type Code	Contact Name	Title	Mailing Address	City	State	Zip Code	E-Mail
ABO ZSR	Robert Button	Operator	PO Box 127	Tontitown	AR	72770	

Type Codes: **A** – Primary Contact; **B** – Bacteriological Sample Bottle Mailing; **$** - Billing; **O** – System Owner / Responsible Party; **Z** – Administrative Address; **F** – Fax; **M** – Mobile Phone; **G** – Pager; **W** – World Wide Web Site; **I** – Internet E-Mail; **R** – Operator; **T** – Water Treatment Plant / Facility; **D** – Distribution Facility; **P** – Pumping Facility; **S** – Storage Facility; **L** – Location; **E** – Employee; **V** – Vendor; **X** – Other

Tontitown Waterworks Schematic