



Arkansas Department of Health

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June 9, 2011

Mr. Mick Wagner
Tontitown Waterworks
P.O. Box 127
Tontitown, AR 72770

RE: Sanitary Survey of May 10, 2011

Mr. Mick Wagner

Enclosed is a copy of the Sanitary Survey for Tontitown Waterworks. Please note the comments made throughout the survey.

Tontitown Waterworks is required to keep a copy of this survey for a minimum of 10 years. This survey should be filed in a central location that will be accessible to the public.

If there are any questions concerning this survey, please contact me at 501-471-1507.

Sincerely,

Jason R. Sells
Environmental Specialist
Engineering Section, ADH

Ph 501-471-1507
Jason.Sells@arkansas.gov

Enclosure: Sanitary Survey for Tontitown Waterworks

CSC:JRS:jrs

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Arkansas Department of Health
Public Water Supply Sanitary Survey

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Name of System Tontitown Waterworks PWS # 566

County Washington

Date of Survey May 11, 2011

Survey By Jason Sells/Craig Corder

Title Environmental Specialist/Engineer Supervisor

Public Water Supply Sanitary Survey

Arkansas Department of Health

Name of System: Tontitown Waterworks PWS # 566
 Address: PO Box 127 Tontitown, AR 72770
 Manager: Mick Wagner License #: _____ Telephone #: 479-361-2996
 Alternate Telephone #: 479-203-7340 Cell #: 479-790-3480 Fax #: 501-421-8774 E-mail Address: director@tontitownws.com
 Treatment Plant Supervisor: _____ License #: _____ Telephone #: _____
 Distribution System Supervisor: _____ License #: _____ Telephone #: _____
 Number of Licensed Employees: 2 # of Treatment Licenses: 0 # of Distribution Licenses: 2
 Mayor/Chairman/President/Other: Steve Gunderson (H) Telephone #: _____
 Address: Water and Sewer Commision (W) Telephone #: _____

of Services: 1022 %Metered: 100 Total Pop. Served: 2555 Retail Pop.Served: _____ Consecutive Pop.Served: _____
 # Domestic: 766 # Commercial: 218 # Wholesale: _____ # Industrial: _____ # Irrigation: 38
 Engineering District: 1 County Name: Washington County Code #: 72
 Plumbing Inspector: David Crutchfield/ Joseph Clark License #: P103010 / P103006

Plant Name & ID	Type of Plant	Construction Date	# of Sources	Type(s) of Source
Master Meter 1 (Barrington)	Master Meter	2001	1	Surface Purchase
Master Meter 2 (Kissinger)	Master Meter	1988	1	Surface Purchase
Master Meter 3 (Sunset)	Master Meter	2000	1	Surface Purchase

Maximum System Capacity: .458 MGD (All Plants)

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

Production Figures								
System Segment	Capacity (MGD)	Limiting Factor	Code	Maximum Demand		Average Demand		Population Served
Plant Name & ID				(MGD)	% Cap.	(MGD)	% Cap.	
Master Meter 1	.153	Contract	8	0.117	%	0.085	%	2555
Master Meter 2	.153	Contract	8	0.117	%	0.085	%	
Master Meter 3	.153	Contract	8	0.117	%	0.085	%	
Primary System	.459			.350	76%	.255	56%	2555
Consecutive Systems		PWS ID #	Status					
Industrial Demand								
Unaccounted-for Water	12 %							

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

☐ Estimated ☒ Calculated

Identify Significant Deficiencies: _____

Give brief evaluation of system condition and operation: Tontitown has no water storage tanks. Tontitown needs to have 24 to 48 hours of useable storage at average demand.

Public Water Supply Sanitary Survey

Arkansas Department of Health

Name of System: Tontitown WaterworksPWS # 566**Purchase Source**Source Entity ID #: 301Source: (# of)PWS Source Name: Springdale WaterPWS ID #: 575 Maximum Purchase Agreement: .153 MGD**Yes** **No**

- | | | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Are maximum purchase agreements adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Has the system been free from shortages of source in the past? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Does source system have adequate emergency plan? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Is source system's overall operation in accordance with the regulations? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Is master meter read routinely and reading recorded? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Is connection to source system adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Is connection to source system provided with adequate backflow prevention? |

Comments: _____

Source Entity ID #: 201Source: (# of)PWS Source Name: Springdale WaterPWS ID #: 575 Maximum Purchase Agreement: .153 MGD**Yes** **No**

- | | | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Are maximum purchase agreements adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Has the system been free from shortages of source in the past? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Does source system have adequate emergency plan? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Is source system's overall operation in accordance with the regulations? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Is master meter read routinely and reading recorded? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Is connection to source system adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Is connection to source system provided with adequate backflow prevention? |

Comments: _____

Source Entity ID #: 101Source: (# of)PWS Source Name: Springdale WaterPWS ID #: 575 Maximum Purchase Agreement: .153 MGD**Yes** **No**

- | | | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Are maximum purchase agreements adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Has the system been free from shortages of source in the past? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Does source system have adequate emergency plan? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Is source system's overall operation in accordance with the regulations? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Is master meter read routinely and reading recorded? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Is connection to source system adequate? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Is connection to source system provided with adequate backflow prevention? |

Comments: _____

Public Water Supply Sanitary Survey

Arkansas Department of Health

Name of System: Tontitown Waterworks PWS # 566Treatment Plant

(Page 1)

Plant: (# of)Plant ID # Plant Name: Plant Location:

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

Purpose ☐ Surface ☐ Iron/Manganese Removal/Control ☐ Organic/DBP Removal
 of Plant ☐ Disinfection ☐ Fluoridation ☐ Corrosion Control ☐ Other

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

- ☒ No Treatment Provided
- ☐ Aeration: ☐ Cascade/Tray ☐ Forced/Induced Draft ☐ Pressure Approved Capacity MGD
- ☐ Disinfection / ☐ Pre ☐ Intermediate ☐ Final ☐ Breakpoint Chlorination ☐ Booster (Indicate on Flow Schematic)
- Oxidation Type: ☐ Cl₂ Gas ☐ Hypochlorite ☐ Ozone ☐ ClO₂ ☐ Chloramines ☐ UV ☐ KMnO₄
- ☐ 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 ft² 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: No water treatment provided by Tontitown Waterworks.

Name of System: Tontitown WaterworksPWS # 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
Chlorine	Continuous	Master Meter 3	Amperometric Sensor	HACH 9184sc

Calibration Records					
	Calibration Frequency	Date Last Calibrated	Are Calibration Logs Available	Field Verification	
				ADH Results	System Results
Turbidimeters					
pH Meters					
Disinfectant Analyzers				0.42	0.46 (HACH CN67)
Disinfectant Analyzers		5/7/11		0.42	0.55 (HACH 9184sc)

- ☒ Yes ☐ No ☐ N/A
1. Are laboratory facilities, testing equipment, and procedures, accurate, adequate, and operable?
 - 1.1 Are records of lab tests being maintained? ☒ Yes ☐ No ☐ N/A
 - 1.2 Do reagents used have an unexpired shelf life? ☒ Yes ☐ No ☐ N/A
 - 1.3 Are continuous turbidimeters and recorders provided on each filter? ☐ Yes ☒ No ☐ N/A
 - 1.4 Is continuous chlorine analyzer and recorder provided on plant effluent? ☐ Yes ☒ No ☐ N/A
 2. Is all routine compliance monitoring up-to-date? (Check monitoring status report.)
 - 2.1 Are the proper numbers of bacti samples being collected? Number required? 3
 - 2.2 For surface systems with conventional treatment, is raw water alkalinity being monitored? ☐ Yes ☒ No ☐ N/A
 - 2.3 For systems using chlorine dioxide, are daily entry point analysis for ClO₂ residual and Chlorite being collected and reported? ☐ Yes ☒ No ☐ N/A
 3. Is the system monitored according to ADH approved methods and sample site plan(s)? ☒ Bacti ☐ CT ☒ Disinfectant Residual ☐ THM ☒ HAA5 ☐ ClO₂ Residual Distribution System Samples (☒ N/A) ☐ Chlorite Distribution System Samples (☒ N/A) ☐ Other _____
 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? ☒ Yes ☐ No ☐ N/A
 5. Are fluoride check samples submitted monthly? ☐ Yes ☒ No ☐ N/A
 6. Are daily fluoride analyses performed, results recorded, and submitted monthly? ☐ Yes ☒ No ☐ N/A
 7. Does the system accurately complete Monthly Operational Report forms?
 - 7.1 Has the system submitted Monthly Operational Report forms on time? ☐ Yes ☒ No ☐ N/A
 - 7.2 Does the system have the proper records on file and available for review? ☒ Sanitary Surveys ☒ Bacteriological and Chemical Analysis Reports ☐ Source Water Assessment Report ☒ Sample Site Plans ☐ Optimal Corrosion Control and Treatment Plan for Lead & Copper Rule (☒ N/A) ☐ Disinfection Profile and Benchmark Report (☒ N/A) ☐ Individual Filter Monitoring Data (☒ N/A) ☐ Filter Profile Report (☒ N/A) ☐ Filter Self-Assessment Report (☒ N/A) ☐ CPE report (☒ N/A) ☒ CCR ☐ Other _____

Comments: _____

Name of System: Tontitown WaterworksPWS # 566Distribution System

- | <u>Yes</u> | <u>No</u> | |
|---------------------------------------|--------------------------|--|
| • <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Are pressures in all portions of the system maintained above 20 psi during peak demand?
If no, give reason: _____ |
| • <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Is a detectable disinfectant residual level maintained in all portions of the system? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Is a sufficient number of valves provided, properly located, and are they accessible? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3.1 Does the system have a valve exercise / replacement program? |
| | | 4. What piping materials are used? (Estimate percentage) <u>7%</u> DI/CI <u>91.6%</u> PVC <u>0</u> Galvanized
<u>1.4%</u> AC Other: _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Has the distribution system been free of water quality problems? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Does the system have an adequate maintenance and flushing program? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Are mains and appurtenances properly flushed, disinfected and tested after repairs or extensions? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 8. Is a licensed plumbing inspector available? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9. Does the system have a meter replacement program? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10. Does the system have a leak detection program? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 11. Is the overall condition of the distribution system acceptable? |

Comments: _____

_____Cross-Connection Control

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

Comments: Tontitown Waterworks has discovered three RPZ that are not properly installed. They are working to get them installed properly or enforcement will shut the water off to client.

Name of System: Tontitown WaterworksPWS # 566System Operations & Management

Identify the management structure of water system.

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

MEMBERS NAME	TITLE
Steve Gunderson	Chairman
Gene Baker	Member
Larry Goddard	Treasurer
Bill Brandt	Vice Chair
Ronnie Delozier	Member

- Yes** **No**
- ☒ ☐ 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 April 2008)
- ☒ ☐ 2. A written emergency plan is on file at the water system.
- ☒ ☐ 3. The emergency plan is up to date and contains the proper names, numbers, etc.
- ☒ ☐ 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 _____
- ☒ ☐ 5. Have all major modifications (since previous survey) been approved by ADH?
- ☒ ☐ 6. Are the systems records being maintained according with regulatory requirements?
☒ Maintenance and repair records ☒ System maps ☒ Operating reports
- ☒ ☐ 7. Is the maximum demand less than 80 percent of capacity (i.e. source, plant, pumping)? If no, discuss corrective actions. _____
- ☐ ☐ 8. If the system has greater than 15% unaccounted for water, are corrective actions being taken? Discuss corrective actions. (☒ N/A) _____
- ☒ ☐ 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 _____
- ☐ ☒ 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 0 Distribution 1
- ☒ ☐ 12. Does system have a completed source water assessment?
- ☒ ☐ 13. Is source water assessment report on file and accessible to the public?

Comments: TTHM LRAA is 84.2 at site 566YC001 and 87.1 at site 566YC002 at the time of survey.

Public Water Supply Sanitary Survey

Arkansas Department of Health

Name of System: Tontitown WaterworksPWS # 566Operator Certification

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

Operator	Title	License #
Robert Button	Chief Operator	05501D4
David Crutchfield	Water Operator	08207D4
Rebecca Bennett	Admin. Assistant	08512D1

Comments: _____

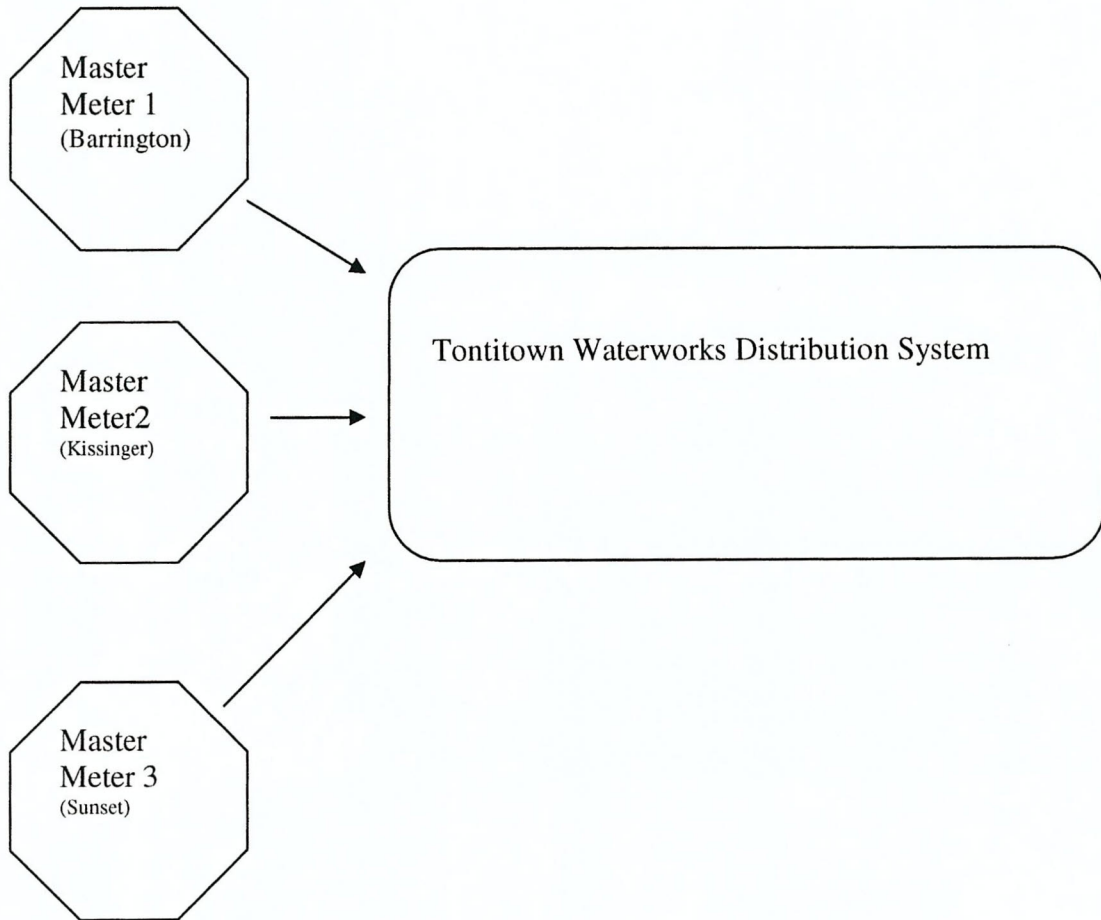
Contact Information

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

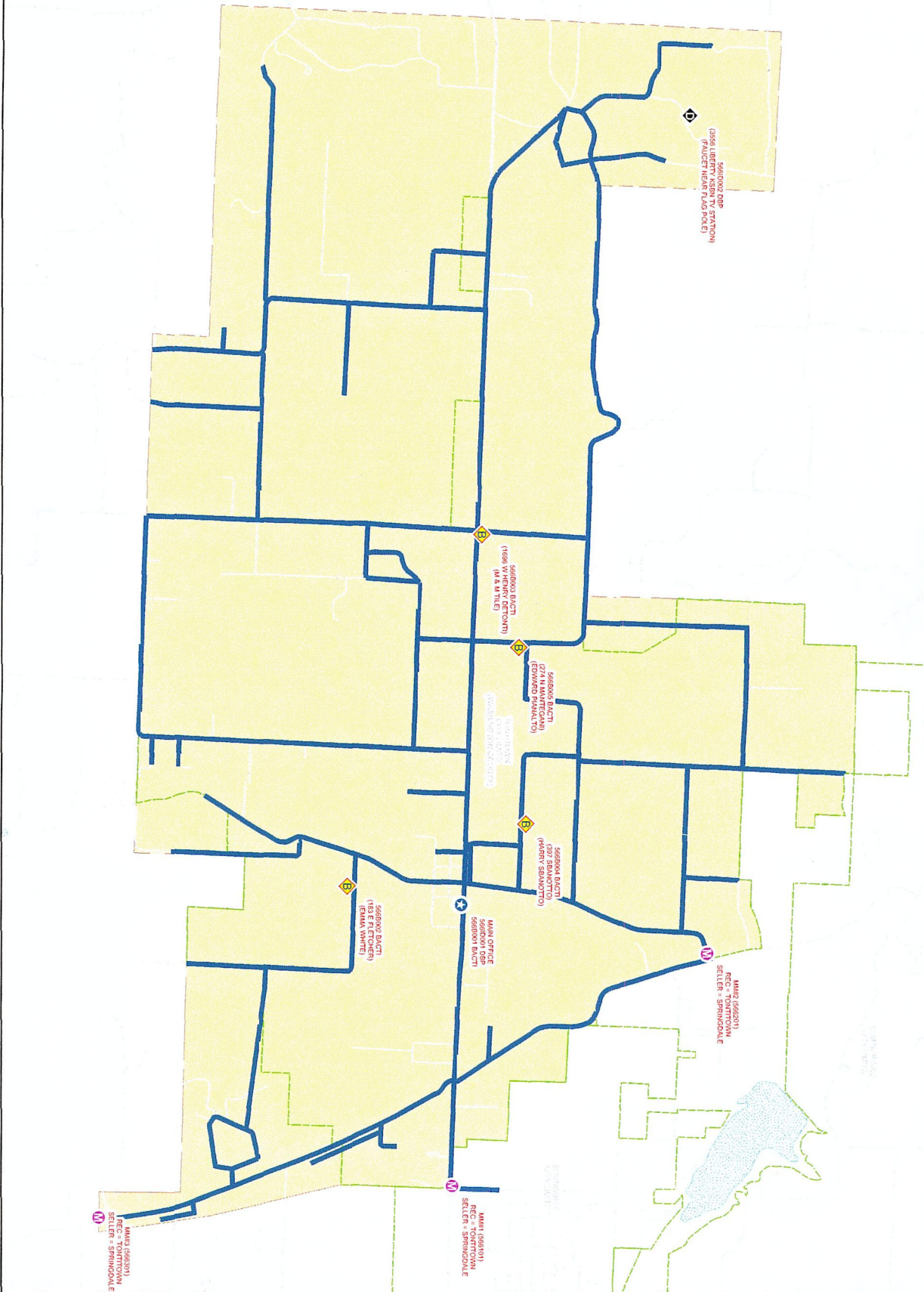
Type Code	Contact Name	Title	Mailing Address	City	State	Zip Code	E-Mail
B\$RE	Rebecca Bennett	Admin. Assistant	P.O.Box 127	Tontitown	AR	72770	admin@tontitownws.com

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 Water Works PWS # 566
System Flow Schematic
Sanitary Survey May 11, 2011



SERVICE AREA (WATERLINES)



TONTITOWN WATERWORKS (PWS 566)



- SOURCE/INLET
 - MASTER METER
 - WATER TANK
 - SEWAGE TREATMENT PLANT
 - PWS OFFICE
 - BACT
 - DISINFECTION BY-PRODUCTS
 - PUMP STATION
 - PRESSURE REDUCING VALVE
 - WATER TREATMENT PLANT
 - 3 OR MORE FACILITIES
 - WATERLINE
 - INTERSTATE
 - US STATE HIGHWAY
 - RAILROAD
 - ROAD
 - SERVICE AREA
 - WATER FEATURE
 - CITY LIMITS
 - COUNTY BOUNDARY
- MAP SCALE: 1 INCH = 0.4 MILES

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Arkansas Department of Health
Keeping You Healthier, Happier