STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES
Bureau for Public Health
Office of Environmental Health Services
Fairmont District Office

Jeffrey H. Coben, MD
Interim Cabinet Secretary

Dr. Sherri A. Young, DO, MBA
Interim Secretary, DHHR

July 31, 2023

Mr. Paul Spencer, Chairman
Adrian Public Service District
P.O. Box 87
French Creek, WV 26218

Re: Sanitary Survey
Adrian Public Service District
WV3304911
Upshur County

Dear Mr. Spencer:

On July 25 & 26, 2023 a Sanitary Survey was conducted of the referenced water system by a representative of the Fairmont District Office of the Office of Environmental Health Services (OEHS). This was performed in accordance with the requirements of the *West Virginia Public Water System Legislative Rule,* and the US EPA Safe Drinking Water Act, as amended. We would like to thank you and the site visit participants for the courtesy and assistance provided during the inspection of your public water supply system.

Eight major elements were reviewed in detail during this sanitary survey. The eight major elements are: source, treatment, distribution system, finished water storage, pumps/pump facilities and controls, monitoring/reporting/data verification, water system management/operation, and operator compliance with State requirements. Deficiencies found or recommendations made concerning these eight major elements are presented in the following sections.

Based upon review of the available records and visual examination of the facilities, **no significant deficiencies were discovered**; however, some "minor" deficiencies and/or "recommendations" may exist and if so, are documented within this letter. Your system should be commended on achieving a level of no significant deficiencies. Any items listed as "minor" or as "recommendations" could eventually lead to more serious conditions, so the system should try to address them but is not required to provide a written response to them as with a significant deficiency.

Significant Deficiencies

A significant deficiency is defined as: *"Any defect in a system's design components, operation, maintenance, or administration, as well as any failure or malfunction of any system component, that the department determines may cause an unacceptable public health risk; have the potential to cause the introduction of contamination into drinking water; or may adversely affect the reliable delivery of safe drinking water to the public."*

No observations were recorded in this category.

Minor Deficiencies

The following observations made at the time of the survey don't fully meet the definition listed previously for significant deficiencies at the present time but have the potential to result in significant deficiencies in the future if not addressed. WVDHHR strongly recommends that the following minor deficiencies be addressed to help maintain compliance with primary drinking water regulations.

1. Distribution system accountability, as reported in the Public Service Commission's annual report, dated 6/30/2022, indicated unaccounted for losses of only 0.51%, which is excellent. However, 23.7% of the purchased water was reported as water main leaks, and only 66.9% of the water purchased during the previous 12-month period was reported to be sold to the customer base. This is significantly less than the state recommended goal of ≥85%.
2. A large hornet nest was discovered on the Alexander Tank on the bottom of the walkway platform.

Recommendations

The following observations made at the time of the survey have the potential to produce or to result in minor or significant deficiencies in the future. WVDHHR recommends that the following be addressed to help maintain compliance with primary drinking water regulations.

1. Continue to monitor the total chlorine residual in the water supply on a daily basis, as required by the Safe Drinking Water Act (SDWA), as amended, and the WV Public Water Systems Legislative Rule (64CSR3), and report the daily test results on the monthly operational report (MOR).
2. Continue to submit the EW-210 MOR to the Office of Environmental Health Services/Environmental Engineering Division (OEHS/EED) at the end of each month, to include the volume of water purchased, daily total chlorine residual, and the pounds (or gallons) of additional chlorine dosed to the water supply, as appropriate.
3. Continue to ensure that an adequate staff of certified operators is employed to operate the water system, in compliance with the SDWA, as amended, and with the West Virginia Public Water Systems Legislative Rule (64CSR3), and the Public Water Systems Operators Legislative Rule (64CSR4).
4. Continue to monitor as required under the SDWA for total coliforms, Lead and Copper and Disinfection By-Products (DBPs) in accordance with the monitoring guidelines provided by the OEHS/EED. Be sure

to sample from pre-approved sampling locations, and submit certified laboratory test results to the OEHS/EED. Continue efforts to determine the presence or absence of lead service lines, as appropriate.

5. Continue to issue public notices as may be periodically necessary for inadvertent violations of the monitoring and reporting requirements. Continue to issue a yearly Consumer Confidence Report (CCR) on or before June 30 each year, based on the previous year's operational data.

6. Continue to maintain water distribution accountability records on a monthly basis as appropriate, with the goal of accounting for ≥85% of metered water sales to the customer base for water purchased through the master meter. Continue the meter testing and /or replacement program.

7. Continue to implement an active cross-connection, backflow prevention program to prevent potential contaminants from backflowing into the distribution system.

8. Coordinate with the third party telemetry and/or SCADA provider, as appropriate, to ensure that cybersecurity precautions have been implemented in accordance with recently adopted USEPA guidelines. Reference *Evaluating Cybersecurity During Public Water System Sanitary Surveys*, EPA Office of Water (4608T), EPA 817-B-23-001, March 2023.

9. It is noted that a current upgrading/expansion project is underway which will add 2 new tanks at Helvetia and Pickens, and 3 new BPSs at Metzner Hollow, Little Meadow Medical Center and at Helvetia. Also the Hinkleville BPS will be upgraded to 400 gpm, the Beechtown BPS will be upgraded to 300 gpm and the Carter BPS will be upgraded to 120 gpm; also, 31.26 miles of 2" - 10" water mains will be added to the system. As of June 30, 2023, about 52.7% of the project has been completed. Also the current telemetry to all tanks and BPS will be upgraded with new software from C.I. Thornburg.

As stated previously, since no "significant deficiencies" were found during this survey you do not need to submit a written response to the items listed; however, the items listed as "minor" or as "recommendations" could eventually lead to more serious conditions, so the system should try to address them.

Should you have any comments or questions concerning this report and its contents please contact me by email at craig.r.cobb@wv.gov or by telephone at 304-368-2530.

Sincerely yours,

Craig R. Cobb

Craig R. Cobb
District Engineer
Fairmont District Office
Environmental Engineering Division

pc: Central Office File, Water Sanitation Surveys
Fairmont District Office file
Eric Brunn, Chief Operator

PHOTOS

This photo shows the site for the 25 gpm Metzner Hollow BPS which will be placed into service within the next several months.

This photo shows the site of the 50 gpm Health Clinic BPS which will be placed into service in the next several months.

PHOTOS (Continued)

This photo shows the site for the 53,000-gallon Helvetia Tank and the 70 gpm Helvetia BPS, which should be in service within the next several months..

This photo shows the site for the 64,000-gallon Pickens Tank, which should be installed and in operation within the next several months.

SANITARY SURVEY

PWSID No. WV3304911
Adrian Public Service District
Upshur County

Adrian PSD office

BY: Craig R. Cobb, District Engineer

WV BUREAU FOR PUBLIC HEALTH
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL ENGINEERING DIVISION
FAIRMONT DISTRICT OFFICE

Conducted: July 25 & 26, 2023

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PWSID No. WV3304911
Adrian Public Service District
Upshur County

Sanitary Survey – July 25 & 26, 2023

ATTACHMENTS:

A. Distribution System Schematic
B. Sanitary Survey Acknowledgement Form
C. Chemical Feeder Charts for Beechtown BPS and Grand Camp BPS

SOURCE
CC-001

Is there a raw water sampling tap available?	YES		NO		NA	X
Is the system monitoring raw water quality?	YES		NO		NA	X
Is there standby power available for the source facility?	YES		NO		NA	X
Does the source supply adequate quantity to meet demand?	YES	X	NO		NA	
Does the system have an emergency spill response plan?	YES		NO		NA	X
Is source used the actual best available source?	YES	X	NO		NA	
Source facilities have duality, can still meet demand with one unit out of service?	YES		NO		NA	X

Raw Water Design Capacity: *NA*

Treated source water from the City of Buckhannon is received through a 4-inch, radio-read Neptune master meter, secured in a concrete vault with a locked Bilco cast-aluminum lid. During April 2023, the PSD purchased a total of 11.234 MG, or about 0.374 MGD. The radio read meter is read daily by the PSD operations staff.

TREATMENT

All treatment is provided by the City of Buckhannon which treats surface water from the Buckhannon River to comply with the mandates of the Safe Drinking Water Act, as amended, and the WV PWS Design Standards (64CSR77). Adrian PSD provides no additional treatment, except for booster chlorination at several of the BPSs.

Average Monthly Water Use Data

Month Year	April 2019	April 2020	April 2021	April 2022	April 2023
Monthly Water Use (MG)	*10.0584*	8.3711	*10.0523*	*8.0448*	*11.234*
Ave. Daily Water Use (MGD)	*0.335*	*0.279*	*0.335*	*0.268*	*0.374*

DISTRIBUTION SYSTEM

Does the system have accurate and up-to-date distribution mapping? YES X NO

Minimum pressure in the system *30 psig-static*

Maximum pressure in the system *90 psig-static*

Is the system pressure being maintained above 30 psi (static conditions) and/or 20 psi (all flow conditions) throughout the distribution system? YES X NO

Piping materials/sizes used *The distribution system includes a total of ~154 miles of water mains, including about 4740-feet of 10-inch; 123,266-feet of 8-inch; 316,325-feet of 6-inch; 297,433-feet of 4-inch; 11,100-feet of 3-inch; and 62,686-feet of 2-inch water mains. Materials include ~90% PVC pipe, with some ductile iron river crossings. Current upgrading/extension project will add 31.26 miles of 2"-10" mains under permit 20,757 issued on 9/7/2021, to include: 5350' of 10", 31,725' of 8", 38,155' of 6", 76,720' of 4" and 13,100' of 2" PVC mains; for a new total of ~185-miles of mains.*

Does the system have any lead service lines? Unknown. Not currently aware of any lead service lines. 72.5% are currently reported as UNKNOWN. YES NO X

If lead service lines are present, does system have a plan to replace those line? YES ✓ NO NA

Working toward the Oct. 2024 due date.

Please Describe: *The oldest construction permit on file was issued on 3/19/1987, so it is anticipated that there are no lead service lines within the water distribution system, but the service line materials, and internal plumbing materials* for each customer are being verified by the PSD operations staff by the October 2024 compliance date. Also, the most recent round of L&C sample results showed very low L&C concentrations for all customers sampled.

Does the system have an adequate distribution flushing program? YES X NO

Reported flushing is twice per year; spring and fall.

Does the system have an adequate distribution valve exercise program? YES X NO

It is understood that valves are exercised during the semi-annual flushing program.

Does the system have adequate valves for isolation of sections of the distribution system?	YES	X	NO	
Does the system have an adequate meter inspection and replacement program?	YES	X	NO	

It is understood that meters are tested or replaced every 10 years.

System monitoring and recording the distribution system total chlorine residuals daily?	YES	X	NO	
Total chlorine residual maintained at or above 0.2 mg/L throughout distribution system?	YES	X	NO	
All distribution mains adequately sized?	YES	X	NO	
If any extension > 1000 ft was installed was a permit obtained?	YES	X	NO	

There are currently 17 construction permits on file, dated from 1987 to 2021.

All new and repaired mains properly flushed, disinfected and bacteriologically tested?	YES	X	NO	

DISTRIBUTION SYSTEM (Continued)

If fire hydrants are provided are they properly maintained?	YES	X	NO		NA	

A total of 99 fire hydrants have been installed, with about 6 additional FHs being added under the current upgrading project.

Does the system have adequate corrosion control program?	YES	X	NO	

Corrosion control treatment is provided by the City of Buckhannon.

Does the system have a cross connection and backflow prevention program?	YES	X	NO	

Cross connection – Backflow program adopted on Sept. 12, 2003.

Does the system have an active cross connection and backflow prevention program?	YES	X	NO	

Four customers have BFP in place; tested every 12-months:

- Tri-County Health Clinic.
- French Creek School.
- Rock Cave School.
- Columbia Gas Co.
- Tested every 12-months.

SERVICE CONNECTION SUMMARY

	Connection Type		
	Commercial	Public Use	Residential
Number of connections	*81*	***1****	*2229*
Meter Size	*1-1/2" thru 5/8"*	*4"*	*5/8"*

Population served *2229 x 2.39= 5327 persons.*

Any Purchase Systems? Yes [ ] No [X] **List them** _____

Does the system purchase from another? Yes [X] No [ ] **List** *City of Buckhannon (PWSID #3304902)*

Total Population served (with all purchase systems) *5327*

See ATTACHMENT *A* **for schematic of the distribution system, which does not include the new tanks and BPSs which will be added under the current upgrading/extension project.**

Does the system have an unaccounted for water percentage less than 15%? YES [X] NO [ ]

But total water sales between 7/1/21 to 6/30/22 were only 66.9% with reported main leaks of 23.7%

Does the system have an unaccounted for water percentage less than 40%? YES [X] NO [ ]

Between 7/1/21 to 6/30/22 unaccounted-for losses were reported to be 0.51%. However, accounted-for losses were reported to be 32.6%, including 23.7% losses attributed to water main breaks. A goal of selling ≥85% of purchased water is strongly recommended.

FINISHED WATER STORAGE

Name of Storage unit/facility ***ST-001 / French Creek Tank site, Tank 1***

Telemetry for this tank site is solar and wind powered. Both tanks have passive mixing. Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass-lined, Bolted steel* **Date of construction** *1987*

Date of last painting: *NA* Date of last cleaning: *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO		
Does storage tank appear to be structurally sound?	YES	X	NO		

Dimensions: *~29 ft tall x ~30.7 ft diameter* Total volume: *161,000 gal*

Is storage tank capacity adequate?	YES	X	NO		

Base elevation: *1781' MSL* Top elevation: *1810' MSL* Overflow elevation: *1810' MSL*

Control type: *US Filter D620i Telemetry to PSD Office and to Hinkleville BPS*

Does system have adequate storage tank level control?	YES	X	NO		NA		
Is storage tank telemetry being utilized?	YES	X	NO		NA		

High water setting: *~22 ft.* Volume: *~122,138 gallons*

Low water setting: *~19.8 ft.* Volume: *~109,924 gallons*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	

Is the storage tank hatch properly secured?	YES	X	NO	
Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-001 / French Creek Tank site, Tank 2*

Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2018*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	**YES**	X	**NO**		
Does storage tank appear to be structurally sound?	**YES**	X	**NO**		

Dimensions *~28.43 ft tall x ~39.16 ft in diameter* **Total volume** *~251,660 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**		

Base elevation *1781' MSL* **Top elevation** *1810' MSL* **Overflow elevation** *1810' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Hinkleville BPS*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**	
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**	

High water setting *~22 ft.* **Volume** *~194,742 gallons*

Low water setting *~19.8ft.* **Volume** *~175,268 gallons*

Does storage tank have a sampling tap?	**YES**	X	**NO**	
Does storage tank have a proper access ladder?	**YES**	X	**NO**	
Does storage tank have adequate fencing?	**YES**	X	**NO**	
Is storage tank site properly graded/drained?	**YES**	X	**NO**	
Is the storage tank foundation in good condition?	**YES**	X	**NO**	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**	
Are the storage tank vents properly screened?	**YES**	X	**NO**	
Is the storage tank hatch properly secured?	**YES**	X	**NO**	

Is the storage tank adequately secured?	**YES**	X	**NO**	
Is there an adequate storage tank access road?	**YES**	X	**NO**	
Does the storage tank have adequate overflow erosion protection?	**YES**	X	**NO**	
Is the storage tank overflow properly screened?	**YES**	X	**NO**	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	**YES**	X	**NO**	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	**YES**	X	**NO**	
Is the storage tank free of any holes caused by damage or corrosion?	**YES**	X	**NO**	
Is the storage tank free of leaks and does not require immediate repair?	**YES**	X	**NO**	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	**YES**	X	**NO**	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	**YES**	X	**NO**	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	**YES**	X	**NO**	
Does the system have adequate storage tank corrosion control measures in place?	**YES**	X	**NO**	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-002 / Rock Cave Tank site, Tank 1*

Both tanks at this tank site have passive mixing.
Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *1987*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	**YES**	X	**NO**	

Does storage tank appear to be structurally sound?	**YES**	X	**NO**	

Dimensions *~29 ft. tall x ~30.7 ft. in diameter* **Total volume** *~161,000 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**	

Base elevation *1934' MSL* **Top elevation** *1963' MSL* **Overflow elevation** *1963' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Beechtown BPS*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**	
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**	

High water setting *~22.6 ft.* **Volume** *~125,469 gallons*

Low water setting *~18.5 ft.* **Volume** *~102,707 gallons*

Does storage tank have a sampling tap?	**YES**	X	**NO**	
Does storage tank have a proper access ladder?	**YES**	X	**NO**	
Does storage tank have adequate fencing?	**YES**	X	**NO**	
Is storage tank site properly graded/drained?	**YES**	X	**NO**	
Is the storage tank foundation in good condition?	**YES**	X	**NO**	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**	
Are the storage tank vents properly screened?	**YES**	X	**NO**	
Is the storage tank hatch properly secured?	**YES**	X	**NO**	

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-002 / Rock Cave Tank site, Tank 2*

Tank Location data is on file.

Type: **Ground** X **Elevated** ☐ **Below ground** ☐

Construction material *Glass lined, bolted steel* **Date of construction** *2018*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO	

Does storage tank appear to be structurally sound?	**YES**	X	**NO**	

Dimensions *~28.43 ft tall x ~30.77 ft in diameter* **Total volume** *~155,361 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**	

Base elevation *1934' MSL* **Top elevation** *1963' MSL* **Overflow elevation** *1963' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Beechtown BPS*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**	
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**	

High water setting *~22.6 ft.* **Volume** *~123,502 gallons*

Low water setting *~18.5 ft.* **Volume** *~101,097 gallons*

Does storage tank have a sampling tap?	**YES**	X	**NO**	
Does storage tank have a proper access ladder?	**YES**	X	**NO**	
Does storage tank have adequate fencing?	**YES**	X	**NO**	
Is storage tank site properly graded/drained?	**YES**	X	**NO**	
Is the storage tank foundation in good condition?	**YES**	X	**NO**	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**	
Are the storage tank vents properly screened?	**YES**	X	**NO**	
Is the storage tank hatch properly secured?	**YES**	X	**NO**	

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-003 / Grand Camp Tank (Big Bend Tank)*

Tank Location data is on file.

Type: Ground [X] Elevated [ ] Below ground [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2004*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	**YES**	X	**NO**		
Does storage tank appear to be structurally sound?	**YES**	X	**NO**		

Dimensions *~33 ft tall x ~16.7 ft in diameter* **Total volume** *~54,000 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**		

Base elevation *1981' MSL* **Top elevation** *2014' MSL* **Overflow elevation** *2014' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Grand Camp BPS*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**		
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**		

High water setting *~30 ft.* **Volume** *~49,091 gallons*

Low water setting *~19.5 ft.* **Volume** *~31,909 gallons*

Does storage tank have a sampling tap?	**YES**	X	**NO**		
Does storage tank have a proper access ladder?	**YES**	X	**NO**		
Does storage tank have adequate fencing?	**YES**	X	**NO**		
Is storage tank site properly graded/drained?	**YES**	X	**NO**		
Is the storage tank foundation in good condition?	**YES**	X	**NO**		

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**		
Are the storage tank vents properly screened?	**YES**	X	**NO**		
Is the storage tank hatch properly secured?	**YES**	X	**NO**		

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-004 / Natural Bridge Tank*

This tank was climbed during the recent survey visit. There was no sediment on the tank bottom, and a sample of water collected from the tank contained a total chlorine residual of 0.61 ppm, OK. Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2004*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO	
Does storage tank appear to be structurally sound?	YES	X	NO	

Dimensions *~24 ft tall x ~30.6 ft in diameter* Total volume *~132,000 gal*

Is storage tank capacity adequate?	YES	X	NO	

Base elevation *2132' MSL* Top elevation *2156' MSL* Overflow elevation *2156' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Carter BPS*

Does system have adequate storage tank level control?	YES	X	NO		NA	
Is storage tank telemetry being utilized?	YES	X	NO		NA	

High water setting *~24 ft.* Volume *~132,000 gallons*

Low water setting *~17.5 ft.* Volume *~96,250 gallons*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	
Is the storage tank hatch properly secured?	YES	X	NO	

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-005 / Salem Ridge Tank*

Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2000*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO	
Does storage tank appear to be structurally sound?	YES	X	NO	

Dimensions *~38 ft tall x ~13.88 ft in diameter* Total volume *~43,000 gal*

Is storage tank capacity adequate?	YES	X	NO	

Base elevation *2141' MSL* Top elevation *2179' MSL* Overflow elevation *2179' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to Wilsontown BPS*

Siemens Telemetry to be installed for entire system by C.I. Thornburg

Does system have adequate storage tank level control?	YES	X	NO		NA	
Is storage tank telemetry being utilized?	YES	X	NO		NA	

High water setting *~32 ft.* Volume *~36,105 gallons*

Low water setting *~24 ft.* Volume *~27,158 gallons*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	
Is the storage tank hatch properly secured?	YES	X	NO	

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-006 / Selbyville Tank*

Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2011*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	**YES**	X	**NO**		
Does storage tank appear to be structurally sound?	**YES**	X	**NO**		

Dimensions *~42 ft tall x ~19.5 ft in diameter* **Total volume** *~94,000 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**		

Base elevation *2460' MSL* **Top elevation** *2502' MSL* **Overflow elevation** *2502' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to the Horseshoe Bend BPS*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**	
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**	

High water setting *~36 ft.* **Volume** *~80,571 gallons*

Low water setting *~18 ft.* **Volume** *~40,286 gallons*

Does storage tank have a sampling tap?	**YES**	X	**NO**	
Does storage tank have a proper access ladder?	**YES**	X	**NO**	
Does storage tank have adequate fencing?	**YES**	X	**NO**	
Is storage tank site properly graded/drained?	**YES**	X	**NO**	
Is the storage tank foundation in good condition?	**YES**	X	**NO**	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**	
Are the storage tank vents properly screened?	**YES**	X	**NO**	
Is the storage tank hatch properly secured?	**YES**	X	**NO**	

Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-007 / Alexander Tank*

We spotted a large hornet nest on the bottom of the walkway platform, which will need to be carefully removed.
Tank Location data is on file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2011*

Date of last painting *NA* **Date of last cleaning** *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO	
Does storage tank appear to be structurally sound?	YES	X	NO	

Dimensions *~24 ft tall x ~25 ft in diameter* Total volume *~88,000 gal*

Is storage tank capacity adequate?	YES	X	NO	

Base elevation *2454' MSL* Top elevation *2478' MSL* Overflow elevation *2478' MSL*

Control type *US Filter D620i Telemetry to PSD Office and to the Alton BPS will be upgraded.*

Does system have adequate storage tank level control?	YES	X	NO		NA	
Is storage tank telemetry being utilized?	YES	X	NO		NA	

High water setting *~21 ft.* Volume *~77,000 gallons*

Low water setting *~16 ft.* Volume *~58,667 gallons*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	

Is the storage tank hatch properly secured?	YES	X	NO	
Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-008 / Cleveland Mountain Tank*

Tank Location data is on file.

Type: **Ground** X **Elevated** ☐ **Below ground** ☐

Construction material *Glass lined, bolted steel* **Date of construction** *2016*

Date of last painting: *NA* Date of last cleaning: *~2018*

Is storage tank sufficiently clean internally?	YES	X	NO		
Does storage tank appear to be structurally sound?	YES	X	NO		

Dimensions: *~70 ft . tall x ~13.95 ft in diameter* Total volume: *~80,000 gal*

Is storage tank capacity adequate?	YES	X	NO		

Base elevation: *2134.5' MSL* Top elevation: *2204.5' MSL* Overflow elevation: *2204.5' MSL*

Control type: *US Filter D620i Telemetry to PSD Office and to the Kanawha Head BPS*

Does system have adequate storage tank level control?	YES	X	NO		NA	
Is storage tank telemetry being utilized?	YES	X	NO		NA	

High water setting: *~66 ft.* Volume: *~75,429 gallons*

Low water setting: *~46 ft.* Volume: *~52,571 gallons*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	

Is the storage tank hatch properly secured?	YES	X	NO	
Is the storage tank adequately secured?	YES	X	NO	
Is there an adequate storage tank access road?	YES	X	NO	
Does the storage tank have adequate overflow erosion protection?	YES	X	NO	
Is the storage tank overflow properly screened?	YES	X	NO	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	YES	X	NO	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	YES	X	NO	
Is the storage tank free of any holes caused by damage or corrosion?	YES	X	NO	
Is the storage tank free of leaks and does not require immediate repair?	YES	X	NO	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	YES	X	NO	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	YES	X	NO	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	YES	X	NO	
Does the system have adequate storage tank corrosion control measures in place?	YES	X	NO	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-009 / Helvetia Tank (under construction)*

Tank Location data will be added to the file.

Type: **Ground** X **Elevated** ☐ **Below ground** ☐

Construction material *Glass lined, bolted steel* **Date of construction** *2023*

Date of last painting *NA* Date of last cleaning *~2023*

Is storage tank sufficiently clean internally?	YES	X	NO	
Does storage tank appear to be structurally sound?	YES	X	NO	

Dimensions *~23.3 ft . tall x ~19.68 ft in diameter* Total volume *~53,000 gal*

Is storage tank capacity adequate?	YES	X	NO	

Base elevation *2865.0' MSL* Top elevation *2888.3' MSL* Overflow elevation *2888.3' MSL*

Control type *New Telemetry to PSD Office by C.I. Thornburg*

Does system have adequate storage tank level control?	YES	X	NO		NA	
Is storage tank telemetry being utilized?	YES	X	NO		NA	

High water setting *To be determined* Volume *To be determined*

Low water setting *To be determined* Volume *To be determined*

Does storage tank have a sampling tap?	YES	X	NO	
Does storage tank have a proper access ladder?	YES	X	NO	
Does storage tank have adequate fencing?	YES	X	NO	
Is storage tank site properly graded/drained?	YES	X	NO	
Is the storage tank foundation in good condition?	YES	X	NO	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	YES	X	NO	
Are the storage tank vents properly screened?	YES	X	NO	

Is the storage tank hatch properly secured?	**YES**	X	**NO**	
Is the storage tank adequately secured?	**YES**	X	**NO**	
Is there an adequate storage tank access road?	**YES**	X	**NO**	
Does the storage tank have adequate overflow erosion protection?	**YES**	X	**NO**	
Is the storage tank overflow properly screened?	**YES**	X	**NO**	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	**YES**	X	**NO**	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	**YES**	X	**NO**	
Is the storage tank free of any holes caused by damage or corrosion?	**YES**	X	**NO**	
Is the storage tank free of leaks and does not require immediate repair?	**YES**	X	**NO**	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	**YES**	X	**NO**	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	**YES**	X	**NO**	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	**YES**	X	**NO**	
Does the system have adequate storage tank corrosion control measures in place?	**YES**	X	**NO**	

Corrosion control is provided by Buckhannon.

FINISHED WATER STORAGE

Name of Storage unit/facility *ST-010 / Pickens Tank (under construction)*

Tank Location data will be added to the file.

Type: **Ground** [X] **Elevated** [ ] **Below ground** [ ]

Construction material *Glass lined, bolted steel* **Date of construction** *2023*

Date of last painting *NA* **Date of last cleaning** *~2023*

Is storage tank sufficiently clean internally?	**YES**	X	**NO**		
Does storage tank appear to be structurally sound?	**YES**	X	**NO**		

Dimensions *~27.9 ft . tall x ~19.76 ft in diameter* **Total volume** *~64,000 gal*

Is storage tank capacity adequate?	**YES**	X	**NO**		

Base elevation *3120.0' MSL* **Top elevation** *3147.9' MSL* **Overflow elevation** *3147.9' MSL*

Control type *New Telemetry to PSD Office by C.I. Thornburg*

Does system have adequate storage tank level control?	**YES**	X	**NO**		**NA**	
Is storage tank telemetry being utilized?	**YES**	X	**NO**		**NA**	

High water setting *To be determined* **Volume** *To be determined*

Low water setting *To be determined* **Volume** *To be determined*

Does storage tank have a sampling tap?	**YES**	X	**NO**	
Does storage tank have a proper access ladder?	**YES**	X	**NO**	
Does storage tank have adequate fencing?	**YES**	X	**NO**	
Is storage tank site properly graded/drained?	**YES**	X	**NO**	
Is the storage tank foundation in good condition?	**YES**	X	**NO**	

FINISHED WATER STORAGE (continued)

Is the storage tank base interface with the foundation properly sealed or caulked?	**YES**	X	**NO**	
Are the storage tank vents properly screened?	**YES**	X	**NO**	

Is the storage tank hatch properly secured?	**YES**	X	**NO**	
Is the storage tank adequately secured?	**YES**	X	**NO**	
Is there an adequate storage tank access road?	**YES**	X	**NO**	
Does the storage tank have adequate overflow erosion protection?	**YES**	X	**NO**	
Is the storage tank overflow properly screened?	**YES**	X	**NO**	
Is the storage tank site free of excessive/uncontrolled vegetation inside and/or around the fenced area?	**YES**	X	**NO**	
Is the storage tank free of overhanging trees or other items which could pose a damage threat to the tank?	**YES**	X	**NO**	
Is the storage tank free of any holes caused by damage or corrosion?	**YES**	X	**NO**	
Is the storage tank free of leaks and does not require immediate repair?	**YES**	X	**NO**	
Is the storage tank free of widespread area of severe oxidation and/or signs the exterior coating has exhausted its useful life span?	**YES**	X	**NO**	
Is the storage tank overall coating in fair or better condition and does not require re-painting consideration for the entire tank at this time?	**YES**	X	**NO**	
Is the storage tank coating free of small areas of concern that would require at least preventative spot painting?	**YES**	X	**NO**	
Does the system have adequate storage tank corrosion control measures in place?	**YES**	X	**NO**	

Corrosion control is provided by Buckhannon.

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use

1. PF 001 - Hinkleville BPS:

Housed in a concrete block building with a locked access door. Dual alternating Grundfos CR-64 pumps operate up to 16 hours per day, to transfer water from Buckhannon to the French Creek Tank site. Pumps are rated at 350 gpm @ 210' TDH, driven by 25 HP, 3-phase Baldor motors, rated at 230/460 volts, 59/29.5 amps, 3525 rpm. Inlet and outlet pressures noted to be 75 psi and 175 psi (dynamic) with one pump running at a measured pumping rate of 222 gpm. Current operating times reportedly ~16 hrs./day for a total transfer of 213,000 gpd. BPS

equipped with meter to document flow rates and is telemetered to the PSD office and the French Creek Tank site. **Will be upgraded to 400 gpm under the current upgrading project.**

Locational data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Horizontal Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~150 gpm (actual pumping rate)*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **2. *PF 002 - Beechtown BPS:***

This BPS is housed in a concrete block building with a locked access door. Dual alternated Grundfos CR-32 pumps operate an average of 16 hours per day to transfer water from the French Creek tank site to the Rock Cave tank site. The pumps are driven by 20 HP, 3-phase Baldor motors, rated at 230/460 volts, 49/24.5 amps, 3525 rpm. The pumping rate is ~140 gpm (1 pump) or 200 gpm (2 pumps). The actual pumping rate observed is ~158 gpm. Inlet and outlet pressures of 70 psi and 210 psi are noted with one pump running. The BPS has a meter to document flow rates and is telemetered to the Rock Cave Tank site and to the PSD office. **Will be upgraded to 300 gpm under the current upgrading project. A feeder calibration chart for this BPS is provided in Attachment C indicating a minimal chlorine dose rate of only about 0.04 ppm.**

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**	
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**	

Pump Capacity *~158 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **3. *PF 003 - Grand Camp BPS (formerly called the Gould Road BPS):***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence and a locked entrance gate. Dual alternated Grundfos CR-16 pumps, rated at 42 gpm @ 449' TDH are driven by 7.5 HP 3-phase Baldor motors, 203/230 volts, 19/18 amps and 3450 rpm. The average pumping rate is 42 gpm against observed static inlet and outlet pressures of 138 psi and 225 psi. The BPS is telemetered to the Grand Camp Tank and runs about 8 hours/day to maintain the Grand Camp Tank water level between 14 and 30 feet. The BPS has a meter to document water flow transfer rates. This BPS has a booster chlorinator, an LMI feeder, rated at 0.68 gph and 250 psi. Data was taken on the chlorinator during the survey visit, and a feeder chart is provided in Attachment C, indicating a chlorine dose rate of 0.51 ppm.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**

Pump Capacity *~42 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **4. *PF 004 – Carter BPS:***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence and a locked entrance gate. Dual alternated Grundfos CR-4 pumps, are driven by 15 HP 3-phase Baldor motors, rated at 208/230 volts, 38/36 amps and 3450 rpm. The actual pumping rate was noted to be 75 gpm at inlet and outlet pressures of 58 psi and 148 psi. The BPS is telemetered to the Natural Bridge Tank, and normally runs ~10 hours per day to maintain a water level in the tank at between 17.5 and 24 feet. This BPS has a Pulsafeeder chlorinator rated at 0.58 gph and 250 psi, and is operated to provide a calculated chlorine dose rate of about 0.5 ppm. **This BPS will be upgraded to 120 gpm under the current upgrading project. One Grundfos pump was recently replaced with a Crane Pump.**

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**

Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**

Pump Capacity *~102 gpm (2 pumps)*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **5. *PF 005 – Wilsontown BPS:***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence and a locked entrance gate. Dual alternated Grundfos CR-8 pumps, rated at 42 gpm @ 531' TDH are driven by 10 HP, 3-phase Baldor motors, rated at 208/230 volts, 27/25 amps and 3450 rpm. The actual pumping rate was noted to be 47 gpm at inlet and outlet pressures of 175 psi and 275 psi. The BPS is telemetered to the Salem Ridge Tank, and draws from the Rock Cave tank about 4 to 6 hours per day (average about 5 hrs./day) to maintain water levels in the Salem Ridge Tank at between 13' and 36.5'. This BPS has a Chem Tech 200 chlorinator rated at 10 gpd and 150 psi, and is operated to provide a calculated chlorine dose rate of about 0.2 ppm.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**	
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**	

Pump Capacity *~47 gpm*

Is pump working properly?	YES	X	NO		NA	
Does system maintain a spare pump or are spare parts available for this pump?	YES	X	NO		NA	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	YES	X	NO		NA	
Does pump have adequate capacity?	YES	X	NO		NA	
Is pump properly designed/maintained?	YES	X	NO		NA	
Is pump location free of flooding potential?	YES	X	NO		NA	
Is pump location properly drained?	YES	X	NO		NA	
Is pump location properly secured?	YES	X	NO		NA	
Does pump location provide standby/backup emergency power?	YES	X	NO		NA	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **6. *PF 006 – Arlington BPS:***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence and a locked entrance gate. The BPS has 3 pumps. Pump #1 is a CR-8 Grundfos unit, rated at 42 gpm @264' TDH. It draws from the Rock Cave Tanks and operates continuously to maintain a line pressure on the water system to serve about 50 customers. It is driven by a 5 HP, 3-phase Baldor motor, rated at 208/230 volts, 13/12 amps and 3450 rpm. Inlet and outlet pressures were noted to be 195 and 245 psi, respectively. Pumps 2 and 3 are CR-16 and CR-8 units operated intermittently as needed. Each pump is rated at 84 gpm and 290' TDH and are driven by 10 HP, 3-phase motors, rated at 208/230 volts, 27/25 amps and 3450 rpm. Booster chlorination is not provided at thus BPS.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~42 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Three pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use ***7. PF 007 – Horseshoe Bend BPS:***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence with a locked entrance gate. Dual, alternated CR-10 Grundfos pumps, rated at 53 gpm and 482' TDH are driven by 10 HP, 3-phase Baldor motors, rated at 230/460 volts, 24/12 amps and 3525 rpm. Static inlet and outlet pressures were 50 psi and 190 psi, respectively. The BPS is telemetered to the Selbyville tank and normally runs about 4 hours/day to transfer water from the Natural Bridge Tank to the Selbyville Tank to maintain water levels in the tank of between 18' and 36'. The BPS is equipped with a Chem Tech feeder, rated at 10 gpd and 150 psi. A chlorine solution is made by mixing two 81-ounce jugs of 7.5% bleach into 30 gallons of solution. At a feeder setting of 60% a chlorine dose rate of ~0.25 ppm is provided.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~53 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	

Does system maintain a spare pump or are spare parts available for this pump?	YES	X	NO		NA	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	YES	X	NO		NA	
Does pump have adequate capacity?	YES	X	NO		NA	
Is pump properly designed/maintained?	YES	X	NO		NA	
Is pump location free of flooding potential?	YES	X	NO		NA	
Is pump location properly drained?	YES	X	NO		NA	
Is pump location properly secured?	YES	X	NO		NA	
Does pump location provide standby/backup emergency power?	YES	X	NO		NA	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use 8. ***PF 008 – Alton BPS:***

This BPS is housed in a prefabricated EFI building, enclosed by a security fence with a locked entrance gate. Dual, alternated CR-15 Grundfos pumps, rated at 90 gpm and 463' TDH are driven by 15 HP, 3-phase Baldor motors, rated at 230/460 volts, 34/17 amps and 3525 rpm. The BPS is telemetered to the Alexander Tank, and the BPS is operated ~5.5 hours per day, to transfer an average of 30,000 gpd to the Alexander Tank. The BPS is equipped with a chlorine booster, an LMI feeder rated at 1.3 gph and 300 psi. Stock solution is mixed by adding two 81-ounce jugs of bleach into 30 gallons of solution. At an assumed feeder setting of 100% a chlorine dose rate of ~0.75 ppm would be expected. During the recent survey visit, static inlet and outlet pressures were noted to be 116 psi and 255 psi, respectively.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~90 gpm*

Is pump working properly?	YES	X	NO		NA	
Does system maintain a spare pump or are spare parts available for this pump?	YES	X	NO		NA	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use 9. ***PF 009 – Indian Camp BPS:***

This BPS is housed in a below-grade USEMCO prefabricated vault on the Grand Camp Tank site, with a backup generator which is programmed to operate the BPS for 1-hour every Tuesday, as well as during any power outages. This 20-70 gpm BPS draws from the Grand Camp Tank to maintain a constant water pressure to about 51 customers in the Indian Camp service area.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *20 to 70 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	

Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **10. *PF 010 – Kanawha Head BPS:***

This 50 gpm BPS draws water from the Rock Cave Tank to transfer water to the Cleveland Mountain Tank. Inlet and outlet static pressures were noted to be about 123 psi and 235 psi, respectively. Booster chlorination is also provided if needed.

Location data is on file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**	
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**	

Pump Capacity *~50 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps are provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	

Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use ***11. PF 011 – Metzner Hollow BPS: (under construction)***

This 25 gpm BPS will draw from the Alexander Tank to serve approximately 6 new customers. Other details of this BPS will be added as it becomes available. The BPS elevation will be ~2330.0' MSL.

Location data will be added to the file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**	
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**	

Pump Capacity *~25 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**	
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**	

Dual pumps will be provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**	
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**	
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**	
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**	
Is pump location properly drained?	**YES**	X	**NO**		**NA**	
Is pump location properly secured?	**YES**	X	**NO**		**NA**	
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**	

BPS will be equipped with a propane backup generator

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **12. *PF 012 – Health Clinic BPS: (under construction)***

This 50 gpm BPS will draw from the Alexander Tank. Other details of this BPS will be added as it becomes available. The BPS elevation will be ~2314.0' MSL.

Location data will be added to the file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~50 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**		
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**		

Dual pumps will be provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**		
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**		
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**		
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**		
Is pump location properly drained?	**YES**	X	**NO**		**NA**		
Is pump location properly secured?	**YES**	X	**NO**		**NA**		
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**		

BPS will be equipped with a propane backup generator.

PUMPS / PUMP FACILITIES AND CONTROLS

Pump Name / Use **13. *PF 013 – Helvetia BPS: (under construction)***

This 70 gpm BPS will draw from the new Helvetia Tank, to transfer water to the new Pickens Tank. It will be installed on the new Helvetia Tank site. Other details of this BPS will be added as it becomes available. The BPS elevation will be ~2858.0' MSL.

Location data will be added to the file.

Displacement Pump:	**Reciprocating**		**Rotary**	X	**Other**		
Centrifugal Pump:	**Vertical Turbine**	X	**Submersible**		**Other**		

Pump Capacity *~70 gpm*

Is pump working properly?	**YES**	X	**NO**		**NA**		
Does system maintain a spare pump or are spare parts available for this pump?	**YES**	X	**NO**		**NA**		

Dual pumps will be provided.

Does the system have sufficient telemetry/communication/alarms for this pump?	**YES**	X	**NO**		**NA**		
Does pump have adequate capacity?	**YES**	X	**NO**		**NA**		
Is pump properly designed/maintained?	**YES**	X	**NO**		**NA**		
Is pump location free of flooding potential?	**YES**	X	**NO**		**NA**		
Is pump location properly drained?	**YES**	X	**NO**		**NA**		
Is pump location properly secured?	**YES**	X	**NO**		**NA**		
Does pump location provide standby/backup emergency power?	**YES**	X	**NO**		**NA**		

BPS will be equipped with a propane backup generator.

MONITORING / REPORTING/ DATA VERIFICATION

	YES	NO	NA
Is the system using proper chlorine residual test kits and reagents?	X		
Use Hach CN-66 test kit with DPD reagent, 0.0-3.5 ppm, in 0.1 ppm increments between 0.0 and 3.0 ppm.			
Is the system using proper monitoring equipment and/or reagents?	X		
Is monitoring equipment properly calibrated?	X		
Are monthly operational reports completed/submitted as required?	X		
Are disinfectant residuals properly recorded/reported on the MOR's?	X		
Is the system conducting all required finished water compliance sampling (RTCR, LCR, DBP, Phs II/V, etc.) **Monitoring for RTCRs, L&C and DBPs.**	X		
Has all testing since the last sanitary survey reflected all contaminates below Primary MCL's?	X		
Has all testing since the last sanitary survey reflected all contaminates below Secondary MCL's?			X
Does the system have an adequate Lead & Copper sampling plan?	X		
12-page L&C Plan approved on 12/27/2022.			
Has the system submitted Annual/Triennial lead and copper sample plan update?	X		
1630 of 2248 likely do not contain lead service lines. All Pb and Cu below 90th% AL for 8/18/2020 samples.			
Does the system have an adequate DBP sampling plan?	X		
Two sample sites: Gains CR 40, and CR 46-Helvitia End-of-Line. LRAA for TTHMs and HAA5s All below 80 ppb THM, and 60 ppb HAA5, OK.			
Does the system have an adequate approved RTCR sampling plan?	X		
6/mo. from 25 sample sites. All TC-A for past 2 years, OK.			
Have all CFE and IFE turbidities been below the required limits in the last 12 months?			X
Is the system continuously monitoring CFE turbidity or taking grab samples every 4 hours as required?			X
Is the system IFE turbidity continuously monitored and recorded every 15 minutes?			X

WATER SYSTEM MANAGEMENT / OPERATION

Is the system free of monitoring/reporting violations since the last sanitary survey?	**YES**	X	**NO**		**NA**	
Are all records maintained properly and available for review?	**YES**	X	**NO**		**NA**	
Does the system maintain equipment records that include information on installation, replacement, and maintenance?	**YES**	X	**NO**		**NA**	
If needed were public notices completed and distributed as required?	**YES**	X	**NO**		**NA**	
Does the system income exceed expenses?	**YES**	X	**NO**		**NA**	

Income / Revenue for previous year *$1,482,457**

Expenses for previous year *$1,230,735**

As reported in the 6/30/2022 PSC Annual Report.

Does the system notify DHHR for breakdowns or loss of water service?	**YES**	X	**NO**		**NA**	
Does the system have an adequate security program?	**YES**	X	**NO**		**NA**	
Does the system have a current Emergency Water Supply Plan?	**YES**	X	**NO**		**NA**	

SYSTEM EMPLOYEES / PERSONNEL

Employee / Personnel Name	Title
Paul Spencer	*PSD Chair*
Carolyn Douglas	*PSD Vice-Chair*
Kelly Arnold	*PSD Secretary /Treasurer*
Norma Woody	PSD Manager
Alicia Wright	PSD Assistant Manager.
(see following section for operators)	

WATER SYSTEM MANAGEMENT / OPERATION (Continued)

PWS Name:	*Adrian Public Service District*
PWSID No.:	*WV3304911*
PWS Mailing Address:	*P.O. Box 87, French Creek , WV 26218*
PWS Physical Address:	
PWS Office Phone:	*(304) 924-6107*
PWS Office Fax:	*(304) 924-7024*
PWS Plant Phone:	*NA*
PWS Plant Fax:	*NA*
Email Address - (contact):	adrianpsd@outlook.com
Cell phone number - (contact):	304-644-6109 (cell) Eric Brunn
Cell phone number - (contact):	

OPERATOR COMPLIANCE WITH STATE REQUIREMENTS

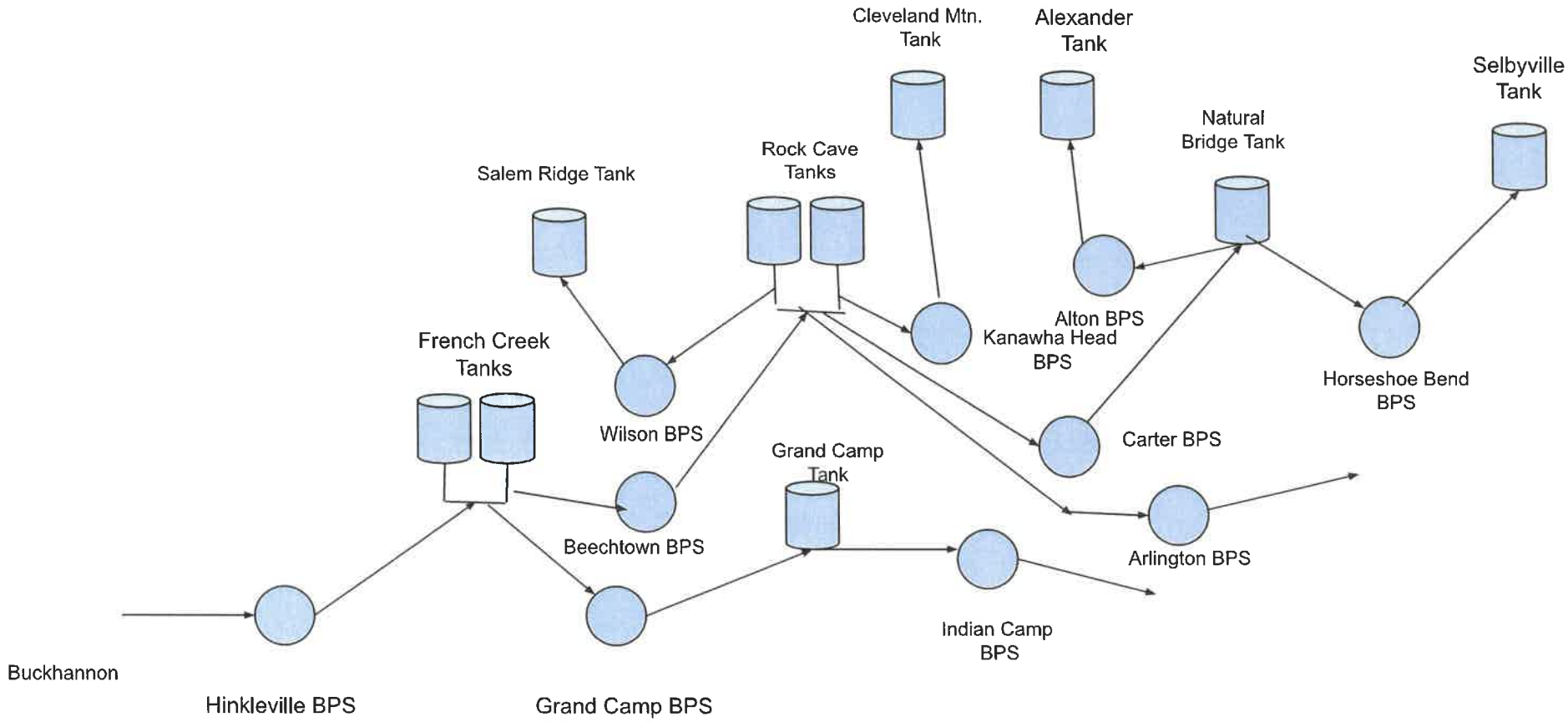
LIST OF OPERATORS

Operator Name	Title / Class	WVOP Number	Expiration Date
Eric Brunn	*Chief Operator /DW-1*	*10018*	*1/31/2024*
Norma Woody	*DW-WD*	*32639*	*5/31/2025*
Kelly Arnold	DW-4	00200	1/31/2024
Alicia Wright	DW-OIT	34101	Took 1D test
Jared Bentley	Applied for OIT		
Ed Tenney	Service Tech	NA	NA

Is the chief operator properly certified for the system?	**YES**	X	**NO**		**NA**	
Has the chief water operator had the required chief water operator training?	**YES**		**NO**	X	**NA**	
***Mr. Brunn needs to take the Chief Operator Course.**						
Are the operators utilized by the system at a proper certification level?	**YES**	X	**NO**		**NA**	
Is there a proper number of certified water operators on staff to sufficiently operate the system? Jared Bentley will be working toward a Class WD license.	**YES**	X	**NO**		**NA**	

ATTACHMENT A

Adrian Public Service District
PWSID #3304911
Water Distribution System Schematic
July 2023
C. Cobb



Additional Comments:

1. Indian Camp BPS maintains constant pressure to serve ~51 customers.
2. Arlington BPS maintains ~235 psi discharge pressure to serve ~50 customers in the Heaston Ridge Subdivision.
3. BPSs are telemetered to the tanks they fill and tanks and BPSs are telemetered to the PSD office.
4. The new Helvetia and Pickens Tanks, and the new Metzner Hollow, Health Clinic and Helvetia BPSs will be added to this schematic in the future, after being placed into service.

Sanitary Survey Acknowledgment Form

ATTACHMENT B

System Name: Adrian PSD

PWSID #: 3304911

Sanitary Survey Conducted Date: 7/25 & 26/2023

A sanitary survey was conducted on the above date for the referenced public water system. A discussion of the findings took place at the conclusion of the sanitary survey and the public water system understands a written letter from the OEHS-EED representative, with the deficiencies discovered, will be sent to the public water system within 30 days of the date the sanitary survey was conducted. The letter will be considered an official date of notification.

The public water system understands and acknowledges they are required to provide a written response for any significant deficiencies identified within 30 days of the official date of notification. The 30-day response shall include the public water systems intent as to if they will be able to correct the significant deficiencies cited within 120 days or if additional time will be needed. If it is determined additional time beyond 120 days will be needed, a detailed corrective action plan will be required within 120 days of the date of notification, in addition to the 30-day response. Failure to provide a written response within 30 days, or a detailed 120-day corrective action plan, if applicable, shall result in a notice of violation being issued.

Significant Deficiencies / 30-day response required **Yes** ☐ **No** ☒

Water System Representative

Name: Eric Brunn

Title: Chief Operator

Eric Brunn — **Signature**

7/26/23 — **Date**

WV DHHR BPH OEHS EED Representative Conducting Sanitary Survey

Name: Craig R. Cobb

Title: District Engineer

Craig R. Cobb — **Signature**

7/26/2023 — **Date**

Chemical Feeder Calibration

C. Cobb, WVBPH/EED

ATTACHMENT C

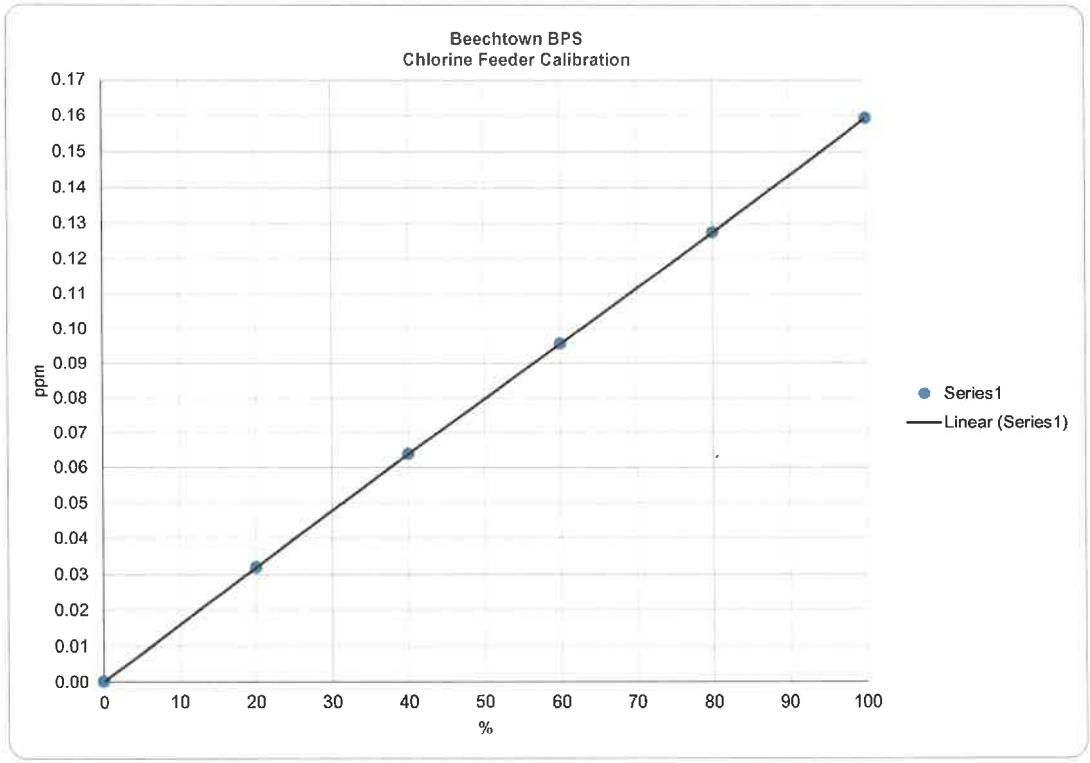
Assumptions:

1	Feeder rated at:	16.32	gpd (max)	LMI feeder rated at 0.68 gph and 250 psi
2	Chemical concentration:	0.01759	lbs/gal	2-81 oz. jugs of 7.5% Clorox into 45 gal of solution
3	Water production rate:	150	gpm	Beechtown BPS reported pumping rate
4	Feeder Speed Setting:	NA		

Feeder Calibration

Feeder Stroke Setting	Measured Feed Rate	Feed Rate	Chemical Dose	Chemical Dose
%	ml/min	gpd	lbs/day	ppm
0	0.00	0.00	0.00	0.00
20	8.58	3.26	0.06	0.03
40	17.16	6.53	0.11	0.06
60	25.74	9.79	0.17	0.10
80	34.32	13.06	0.23	0.13
100	42.90	16.32	0.29	0.16

Feeder Setting	Chemical Dose
%	ppm
0	0.00
20	0.03
40	0.06
60	0.10
80	0.13
100	0.16



Notes:

1 LMI Feeder rated at 0.68 gph (16.32 gpd).

2 At a feeder setting of 26%, a chlorine dose rate of ~0.04 ppm would be expected.

C. Cobb & E. Brunn

7/25/2023

Chemical Feeder Calibration

C. Cobb, WVBPH/EED

ATTACHMENT C

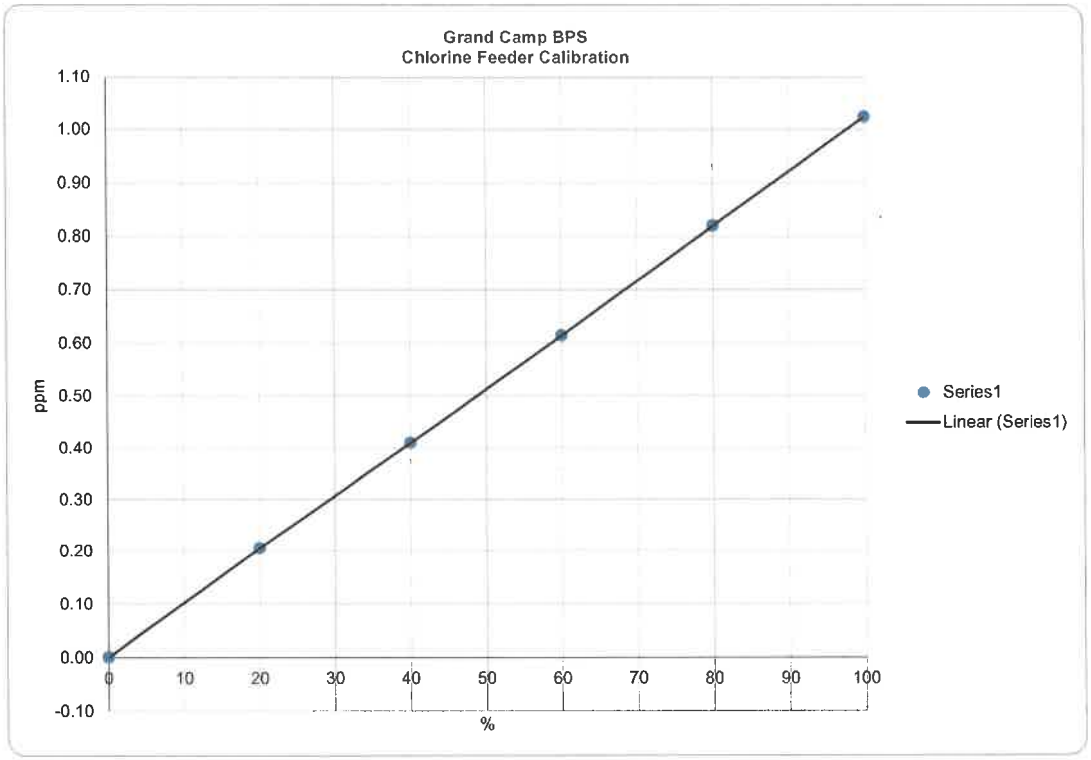
Assumptions:

1	Feeder rated at:	16.32	gpd (max)	LMI feeder rated at 0.68 gph and 250 psi
2	Chemical concentration:	0.03166	lbs/gal	3-81 oz. jugs of 7.5% Clorox into 25 gal of solution
3	Water production rate:	42	gpm	Grand Camp BPS reported pumping rate
4	Feeder Speed Setting:	NA		

Feeder Calibration

Feeder Stroke Setting	Measured Feed Rate	Feed Rate	Chemical Dose	Chemical Dose
%	ml/min	gpd	lbs/day	ppm
0	0.00	0.00	0.00	0.00
20	8.58	3.26	0.10	0.20
40	17.16	6.53	0.21	0.41
60	25.74	9.79	0.31	0.61
80	34.32	13.06	0.41	0.82
100	42.90	16.32	0.52	1.02

Feeder Setting	Chemical Dose
%	ppm
0	0.00
20	0.20
40	0.41
60	0.61
80	0.82
100	1.02



Notes:

1 LMI Feeder rated at 0.68 gph (16.32 gpd).

2 At a feeder setting of 50%, a chlorine dose rate of ~0.51 ppm would be expected.

C. Cobb & E. Brunn

7/25/2023