Water & Sanitary Board Agenda
Thursday, June 30, 2022
12:30 p.m.
Town Hall
104 N. King St.
Shepherdstown, WV 25443
Masks - Optional

1. Call to Order
2. Review and approval of Draft Water and Sanitary Board Minutes of June 2, 2022
3. Visitors
4. Finances
    a. Financial Statements

5. Flow and Quality Reports
    a. (1) Water – Reports – information item
    b. (2) Sewer – Reports - information item

6. Unfinished Business

    a. Sewer Use Ordinance – Revision and comments – Summer, 2022
    b. Water Plant Improvement Project – Jeff Ekstrom to report
    c. Update on Water Distribution Project – (Region 9 – Corp. of Engineers)
    d. Update on 120Water – "Woody" Coe

7. New Business

    a. Sheetz Store – Approval of Step II - Alternate Mainline Extension Agreement – PSC has approved
    b. Hydrant Report – Woody Coe to report
    c. Tollhouse Woods – Horton Builders has purchased land.
    d. Commercial Center – Lowe Bypass – Approval of Step II – Alternate Mainline Extension Agreement – Sent to PSC

8. Mayor's Report
9. Next meeting date – July 28, 2022
10. Summarize Action Items from this meeting
11. Draft Agenda for next meeting
12. Adjournment

DRAFT MINUTES
CORPORATION OF SHEPHERDSTOWN, WEST VIRGINIA
WATER & SANITARY BOARDS

June 2, 2022

ATTENDEES: **Water Board** – J. Auxer (Mayor), J. Bresland, J. Ford, M. Godfrey, S. Kemnitzer (Chair), S. Knuppel
Sanitary Board – J. Auxer (Chair), H. Heyser, R. Keller
Town Staff –C. Coe, K. Shipley, F. Welch, J. Ekstrom (Ghosh Engineers), B. Bennett
Visitors: D. Decker, Steve Pearson, Pat Dorsey

1. **CALL TO ORDER.**
The Water and Sanitary Boards meeting was called to order by J. Auxer at 12:32 p.m.

2. **MINUTES FROM PRIOR MEETING.**
The proposed minutes of the April 28, 2022, regular meeting were reviewed and approved as submitted.

3. **VISITORS.**
In light of his upcoming retirement, S. Kemnitzer thanked Pat Dorsey for his 28 years of service at the Water plant and presented him with a congratulatory plaque.

4. **FINANCES.** Financial Statements Discussion
D. Decker attended the meeting to present an overview of our financial situation.

S. Kemnitzer stated that, in addition, she was interested in any recommendations for improving how we handle our finances.

D. Decker stated that his review of the last few years of our financial reporting uncovered some inconsistencies. However he has been working with D. Fogle and B. Bennett and believes that our updated reporting is now consistent.

D. Decker informed us that his major concern after his review has to do with the Sewer finances. A requirement of the Sewer bond is that our net income, before payment of the debt service, must be at least 110% of the debt service amount. Recent increased costs, especially those associated with membrane replacement, have resulted in our net income not meeting this requirement. His advice was that we should immediately consider an increase in our sewer rates.

R. Keller asked if the membrane-related costs could not be treated as capital expenses.

D. Decker responded that those costs could not be treated as capital expenses because they do not extend the life of the plant.

R. Keller asked how we should handle these costs in our budgeting process since the money that is put into an account each month to cover the eventual membrane replacements appears only on the balance sheet as a transfer and not on the profit/loss report as an expense until the money is actually spent.

D. Decker suggested that we could include a transfer line-item in our monthly reports so that we could have an idea of the membrane expenses in an ongoing manner.

J. Auxer stated that there had not been a sewer rate increase since the new sewer plant was built. He requested that D. Decker prepare the information needed to consider a rate increase so that our budgeted net income will cover our debt service requirement.

K. Shipley then addressed another concern related to the sewer plant. The dewatering sludge press is 14 years old and it is showing significant inefficiency in its operation. J. Ekstrom has successfully demonstrated a new press which is 50% more efficient in capturing solids. Rebuilding the old press would cost $250K - $300K. The cost of a new press is approximately $335K. The negative impact of the old press makes this an emergency situation.

J. Auxer asked if a new press could be paid for from the Capacity account.

J. Ekstrom replied that he did not think this was an issue that qualified to be paid for from Capacity but that there was over $400K in the R&R account that could be used.

It was generally agreed that the press should be replaced as soon as possible. J. Auxer stated that there could not be a vote to spend the money at this meeting since it did not appear on the agenda. He did ask for a motion to authorize J. Ekstrom to get bids on providing a new press.

ACTION ITEM: H. HEYSER MOVED AND R. KELLER SECONDED TO AUTHORIZE J. EKSTROM TO ADVERTISE FOR BIDS TO PROVIDE A NEW DEWATERING SLUDGE PRESS. MOTION PASSED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

There was a discussion concerning the mechanics of how the income from water and sewer payments were kept separate.

Prior to the meeting, S. Kemnitzer had distributed a list of finance-related questions that she was interested in having answered. Two documents were presented that partially addressed these questions:

F. Welch presented a list of the outstanding bonds (both water and sewer) which listed the pertinent financial details of each - e.g. Issue Date, Full Amount, Interest Rate, Balance, Payoff Date, ...).

D. Decker presented a graphical analysis that covered the last 4 years and included revenue, expenses, net income and number of customers for both water and sewer.

5. FLOW AND QUALITY REPORTS.

5.a WATER REPORTS - NO VIOLATIONS.

C. Coe reported that everything is in good order.

5.b. SANITARY REPORTS – NO VIOLATIONS.

K. Shipley reported that everything is in good order.

R. Keller asked about a report that was labelled 'DEP' but had little other explanatory information of what the numbers represented. F. Welch responded that the report was mistakenly included in the package and that it was produced for the DEP and its format was specified by the DEP.

H. Heyser inquired about a discrepancy in 2 monthly average flow amount figures. K. Shipley checked the figures and determined that the number represented April's average flow and was derived by dividing the total monthly flow by the number of days in the month. In one case it was divided by 30 (correct) and in the other case it was divided by 31 (incorrect).

6. UNFINISHED BUSINESS.

6.a SEWER USE ORDINANCE – REVISION AND COMMENTS - SUMMER 2022.

R. Keller explained that he is heavily involved in the construction of the new Library and would be able to make progress on this issue when the Library project has been completed.

6.b WATER PLANT IMPROVEMENT PROJECT - JEFF EKSTROM TO REPORT.

J. Ekstrom reported that construction was progressing smoothly. The sludge removal equipment was being installed this week, the filter equipment is expected to be installed soon and the control panels are expected next month.

6.c **UPDATE ON WATER DISTRIBUTION PROJECT - (REGION 9).**
F. Welch reported that the project has received all the necessary approvals from Sen. Capito's office and that we are currently waiting for the Army Corps of Engineers to release the funding.

7. **NEW BUSINESS.**

7.a **SHEETZ STORE - APPROVAL OF STEP II - ALTERNATE MAINLINE EXTENSION AGREEMENT - TO BE SENT TO PSC.**
F. Welch reported that the new Sheets facility has opened and that we are still waiting for PSC approval.

7.b **HYDRANT REPORT.**

C. Coe presented the Hydrant Project Work List. It included 8 hydrants that require either repair or replacement. He stated that the necessary work was being scheduled.

7.c **RENEWAL OF COLONIAL HILLS PHASE III - WATER AND SEWER APPLICATION.**
F. Welch reported that an updated application renewal request had been received with the proper name of the current owner.

ACTION ITEM: M. GODFREY MOVED AND J. BRESLAND SECONDED FOR THE WATER BOARD THAT THE APPLICATION RENEWAL BE APPROVED. MOTION PASSED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

ACTION ITEM: R. KELLER MOVED AND H. HEYSER SECONDED FOR THE SANITARY BOARD THAT THE APPLICATION RENEWAL BE APPROVED. MOTION PASSED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

J. Ford remarked that it had been decide during the April meeting that we should have a general review of our application renewal process and specifically address a limitation on how often an application can be renewed. It was generally agreed that it should be included on next month's agenda.

7.d **PURCHASE OF FENCE.**
C. Coe reported that the fence replacement had been put out to bid and only one bid as received. It was from Long Fence for $40,125. There is $13,000 included in the project budget for the fence. J. Ekstrom mentioned that the money could come from the R&R account.

ACTION ITEM: M. GODFREY MOVED AND S. KEMNITZER SECONDED THAT THE LONG FENCE BID BE ACCEPTED. MOTION PASSED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

8. **MAYOR'S REPORT.** Nothing to report.

9. **NEXT MEETING DATE.**
Thursday, June 30, 2022, at 12:30PM at Town Hall.

10. **SUMMARIZE ACTION ITEMS FROM THIS MEETING.**

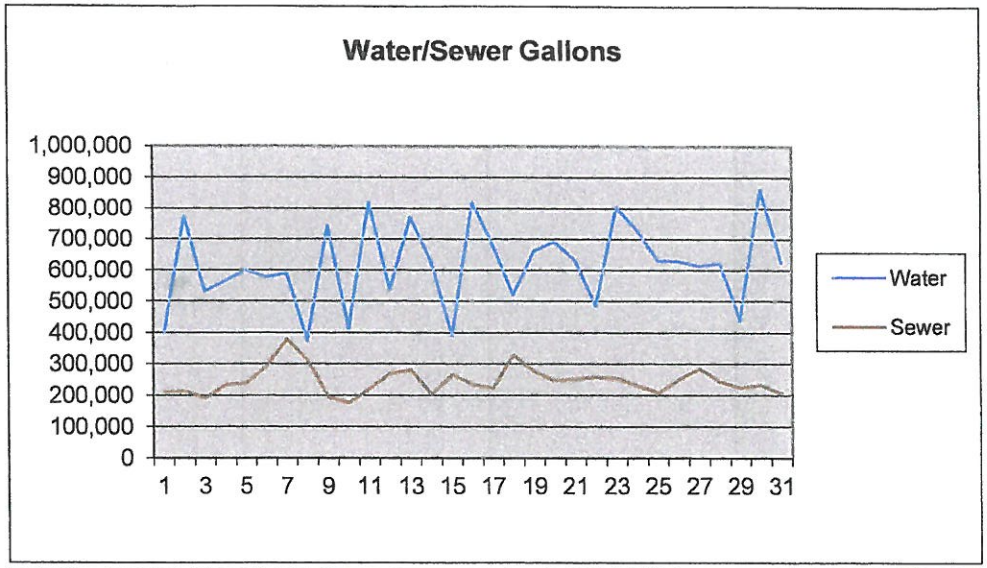
11. **DRAFT AGENDA FOR NEXT MEETING.**

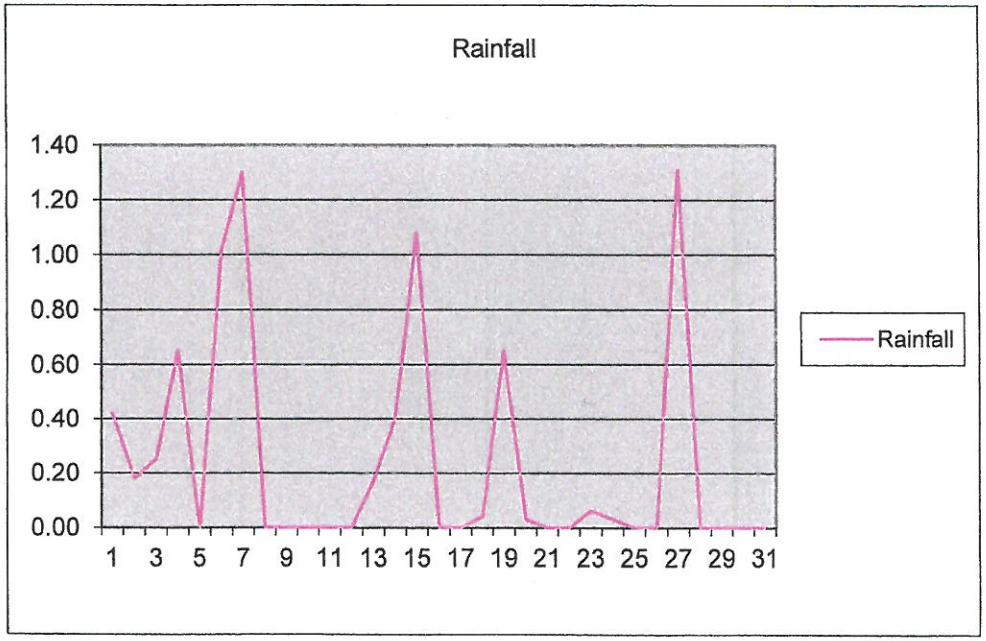
12. **ADJOURNMENT.** J. Auxer adjourned the meeting at 2:14 p.m.

Respectfully Submitted: J. Ford

Water/Sewer Flows May 2022

Date	Water	Sewer	RainFall
1	397,900	210,700	0.42
2	772,100	213,600	0.18
3	531,000	191,900	0.25
4	565,300	233,700	0.65
5	600,000	238,000	0.00
6	576,800	292,900	1.01
7	590,700	380,900	1.30
8	374,600	312,200	0.00
9	742,900	196,200	0.00
10	413,300	177,100	0.00
11	819,700	222,000	0.00
12	536,200	269,100	0.00
13	769,300	280,800	0.17
14	627,300	203,300	0.40
15	391,000	266,400	1.08
16	820,000	233,900	0.00
17	681,500	223,400	0.00
18	519,600	327,800	0.04
19	660,800	276,800	0.65
20	691,100	247,600	0.03
21	631,800	251,200	0.00
22	484,700	258,100	0.00
23	805,300	254,300	0.06
24	730,000	230,600	0.03
25	630,100	207,800	0.00
26	628,800	251,000	0.00
27	612,800	284,800	1.31
28	621,100	243,400	0.00
29	438,200	224,500	0.00
30	863,500	233,500	0.00
31	624,100	206,200	0.00
Avg.	**617,790**	**246,571**	**0.24**





May 2022 Monthly Reports

	Avg.		Max		Avg. Allowed	Max Allowed		Avg. Lbs.	Max Lbs.	Avg. Lbs. Allowed	Max Lbs. Allowed	Yearly Lbs.	Yearly Lbs. Allowed
Flow	0.2466	Mgd	0.3809	Mgd	0.6670	Rpt Only		N/A	N/A	N/A	N/A		
BOD	<3	Mg/l	<3	Mg/l	30	60		5.34	5.34	167	334		
TSS	2.5	Mg/l	2.5	Mg/l	30	60		4.45	4.45	167	334		
TKN	0.60	Mg/l	1.20	Mg/l	3	6		1.12	2.14	17	33		
Fecal	<10	Cnts/100 Ml	<10	Cnts/100 Ml	200	400		N/A	N/A	N/A	N/A		
Total N	1.85	Mg/l	2.81	Mg/l	Rpt Only	Rpt Only		N/A	117.93	N/A	507	758.5	6091
Total P	0.013	Mg/l	0.019	Mg/l	Rpt Only	Rpt Only		N/A	0.83	N/A	50.7	11.22	609
Copper	<0.0037	Mg/l	<0.0037	Mg/l	0.0094	0.0212		N/A	N/A	N/A	N/A		
Zinc		Mg/l		Mg/l	Rpt Only	Rpt Only		N/A	N/A	N/A	N/A		
Lead		Mg/l		Mg/l	Rpt Only	Rpt Only		N/A	N/A	N/A	N/A		
Aluminum		Mg/l		Mg/l	Rpt Only	Rpt Only		N/A	N/A	N/A	N/A		
Chloride		Mg/l		Mg/l	Rpt Only	Rpt Only		N/A	N/A	N/A	N/A		
Total Hardness		Mg/l		Mg/l	Rpt Only	Rpt Only		N/A	N/A	N/A	N/A		
					Min Allowed	Max Allowed							
PH	7.2	S.U.	7.2	S.U.	6.5	8.5		N/A	N/A	N/A	N/A		

Field Name	Applied This Month		Year to Date Applied		Loads	Percent Solids	2 Hr PH	24 Hr PH
Landfill	6.847	Tons	44.8664	Tons	6	23.6		
Olcott Field 2		Tons		Tons				
Olcott Field 3		Tons		Tons				
Olcott Field 4		Tons		Tons				
Olcott Field 6		Tons		Tons				
Blair-Carter Field 1		Tons		Tons				
Blair-Carter Field 3		Tons		Tons				
Blair-Carter Field 4		Tons		Tons				
Willard Field 1		Tons		Tons				
Willard Field 3		Tons		Tons				
Willard Field 4		Tons		Tons				
Colbert Field 3		Tons		Tons				
Colbert Field 4		Tons		Tons				
Oakley Field 2		Tons		Tons				
Putz Field 2		Tons		Tons				

ES-59 (rev 5/07)

SUMMARY OF WASTE WATER TREATMENT PLANT OPERATIONS

Month May Year 2022 Plant Shepherdstown W.W.T.P. City Shepherdstown Operator Kenny Shipley

		INFLUENT WASTEWATER						DIGESTERS		ACTIVATED SLUDGE	EFFLUENT TEMP.	PLANT EFFLUENT							
Date	Rainfall (inches)	TSS (mg/l)	BOD_5 (mg/l)	Flow (mgd)	Temp (F°)	pH	Grit and Screening (cf)	Sludge Added (gal)	Removed (gal)	M.L.S.S.	Degrees Celsius	TSS (mg/l)	BOD_5 (mg/l)	Fecal Coli (per 100 ml)	DO (mg/l)	pH	TKN (mg/l)	Total N (mg/l)	Total P (mg/L
1	0.42			0.2107				16000											
2	0.18	286	183	0.2136				36000				2.5	<2	<10		7.2	1.20	1.97	<0.01
3	0.25			0.1919				28000		6431									
4	0.65			0.2337				28000	12382										
5				0.2380				28000	12382										
6	1.01			0.2929				28000	12381										
7	1.30			0.3809				28000											
8				0.3122				28000											
9				0.1962				40000									0.41	2.81	0.012
10				0.1771				40000		5944									
11				0.2220				24000	12381										
12				0.2691				24000	12381										
13	0.17			0.2808			7	24000	12381										
14	0.4			0.2033				24000											
15	1.08			0.2664				24000											
16				0.2339				24000									0.4	1.90	<0.01
17				0.2234				16000											
18	0.04			0.3278				16000	12381										
19	0.65			0.2768				32000	12381										
20	0.03			0.2476				20000	12381										
21				0.2512				20000											
22				0.2581				20000											
23	0.06			0.2543			8	24000									0.4	0.73	0.019
24	0.03			0.2306				24000		5824									
25				0.2078				24000	12382										
26				0.2510				24000	12382										
27	1.31			0.2848				16000	12382										
28				0.2434				16000											
29				0.2245				16000											
30				0.2335				16000											
31				0.2062				32000											
Total	7.58	286	183	7.6437			15	760000	148577	18199		2.5	<3	<10		7.2	2.41	7.41	0.051
Average	0.51	286	183	0.2466			7.5	24516	12381	6066		2.5	<3	<10		7.2	0.60	1.85	0.013
Minimum	0.03	286	183	0.1771			7	16000	12381	5824		2.5	<3	<10		7.2	0.40	0.73	<0.01
Maximum	1.31	286	183	0.3809			8	40000	12382	6431		2.5	<3	<10		7.2	1.20	2.81	0.019

MAIL ONE COPY EACH TO:

Office of Environmental Health Services
Certification & Training Program
350 Capitol Street, Room 313
Charleston WV 25301-1798

Division of Environmental Protection
ATTN: Municipal Branch
601- 57th Street
Charleston, WV 25304

HYDRANT PROJECT WORK LIST

LOCATION	VALVE Y/N?	VALVE n Service?	ISSUE WITH HYDRANT	PROPOSED WORK PLAN	STATUS	REPORT	DATE
HYDRANTS OUT OF SERVICE/NEED REPAIRS							
388 Starkeys Landing	Yes	No	Hit by vehicle	Repair in place, move hydrant			
Green Pineapple	Yes	No	Broke off stem/Loading Zone	Replace Hydrant/ install bollards			
HYDRANTS TO BE REMOVED AND RETIRED							
Corner King & New Streets			4" main, inadequate supply	Retire hydrant, covered by other hydrants			
Corner Church & New Street			4" main, inadequate supply	Retire hydrant, covered by other hydrants			
East High Street (Tommy's Pizza)			4" main, inadequate supply	Retire hydrant, covered by other hydrants			
HYDRANTS IN SERVICE/NEED REPAIRS							
Bon Aire Cul de sac	Yes	Yes	No Drain/Hard to operate	Replace hydrant			
High Street at Stutzman-Slonake	Yes	Yes	Hydrant won't drain	Repair in place			
W. High st/ N. Duke st.	?	Yes	Hard to operate	Replace hydrant			
426 Willowdale Dr	?	Yes	too low	Needs Riser			
318 Shepherd Ln	?	Yes	Leaking at base	Repair in place			
Jala Yoga	Yes	Yes	Leaking from top/Vibrating bad	Repair in place			
NEW HYDRANTS							
Library			In service				
Library Entrance			In service				
Tack & Jack's Apartments, Duke	?	?	Taken out by drunk driver	Replace			
HYDRANTS WITH PROPERTY ISSUES							
DEDICATED HYDRANTS							
SU Baseball field end of High Street			Open only w/permission of Wate	Special tag, alert firefighters			
SFD Fire Hall			Open only w/permission of Wate	Special tag, alert firefighters			
Mecklenburg Heights			Open only w/permission of Wate	Special tag, alert firefighters			
NOTES							
Minimum clearance for bollards: 36"			36'				
Total gallons flushed			378,900				
*Loop behind Roc's- distribution project							



MONTHLY OPERATIONAL REPORT

Required Surface/(GWUDI)

PWSID NUMBER: WV 3301933

MONTH/YEAR: May 2022

SYSTEM NAME Shepherdstown Water **PHONE NUMBER** 304-876-2394 **COUNTY** Jefferson

PLANT FLOW				CHEMICALS USED								Indicate chemicals used in blocks below								FILTER BACKWASH	
DATE	Plant Oper Time (HRS)	Filtered Water (GALS)	Flow Rate (GPM)	del-pac				fluoride				potassium permanganate				Pre Chlorine		Post Chlorine		Number of Filters Washed	Wash Water (GALS)
				lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm		
1	8	397,900	799	180	54.2		0.0	11	3.3		0.0	5	0.2		0.0		0.0	8	2.4	2	16,205
2	16	772,100	814	349	54.2		0.0	17	2.6		0.0	7	1.1		0.0		0.0	14	2.2	2	17,561
3	11	531,000	805	240	54.2		0.0	12	2.7		0.0	6	1.4		0.0		0.0	8	1.8	2	21,880
4	12	565,300	785	256	54.3		0.0	9	1.9		0.0	5	1.1		0.0		0.0	12	2.5	2	14,143
5	12	600,000	833	271	54.2		0.0	14	2.8		0.0	9	1.8		0.0		0.0	14	2.8	2	13,538
6	12	576,800	801	261	54.3		0.0	15	3.1		0.0	6	1.2		0.0		0.0	11	2.3	2	14,640
7	12	590,700	820	267	54.2		0.0	16	3.2		0.0	10	2.0		0.0		0.0	13	2.6	2	15,328
8	8	374,600	780	169	54.2		0.0	10	3.2		0.0	5	1.6		0.0		0.0	7	2.2	2	14,500
9	15	742,000	824	335	54.1		0.0	16	2.6		0.0	7	1.1		0.0		0.0	15	2.4	2	19,891
10	8	413,300	861	187	54.3		0.0	9	2.6		0.0	4	1.2		0.0		0.0	9	2.6	2	17,156
11	17	819,700	804	370	54.1		0.0	18	2.6		0.0	7	1.0		0.0		0.0	16	2.3	2	16,103
12	11	536,200	812	242	54.1		0.0	14	3.1		0.0	5	1.1		0.0		0.0	10	2.2	2	13,164
13	16	769,300	801	348	54.2		0.0	18	2.8		0.0	9	1.4		0.0		0.0	11	1.7	2	15,893
14	13	627,300	810	284	54.2		0.0	14	2.7		0.0	16	3.1		0.0		0.0	10	1.9	2	14,860
15	8	391,000	805	177	54.2		0.0	10	3.1		0.0	5	1.5		0.0		0.0	7	2.1	2	17,956
16	17	820,000	803	371	54.2		0.0	19	2.8		0.0	9	1.3		0.0		0.0	15	2.2	2	16,300
17	14	681,500	811	308	54.2		0.0	15	2.6		0.0	8	1.4		0.0		0.0	10	1.8	2	15,500
18	13	519,600	666	235	54.2		0.0	12	2.8		0.0	6	1.4		0.0		0.0	11	2.5	2	13,328
19	17	660,500	648	299	54.3		0.0	15	2.7		0.0	7	1.3		0.0		0.0	14	2.5	2	13,404
20	16	691,100	720	312	54.1		0.0	17	2.9		0.0	8	1.4		0.0		0.0	11	1.9	2	15,155
21	13	631,800	792	286	54.2		0.0	14	2.7		0.0	18	3.4		0.0		0.0	11	2.1	2	14,519
22	10	484,700	808	219	54.2		0.0	12	3.0		0.0	6	1.5		0.0		0.0	8	2.0	2	16,455
23	16	805,300	839	364	54.2		0.0	20	3.0		0.0	9	1.3		0.0		0.0	18	2.7	2	17,351
24	15	730,000	811	330	54.2		0.0	16	2.6		0.0	8	1.3		0.0		0.0	10	1.6	2	12,873
25	13	630,100	808	285	54.2		0.0	13	2.5		0.0	6	1.1		0.0		0.0	14	2.7	2	14,558
26	13	628,800	806	284	54.2		0.0	15	2.9		0.0	8	1.5		0.0		0.0	13	2.5	2	13,703
27	13	612,800	786	277	54.2		0.0	15	2.9		0.0	7	1.4		0.0		0.0	13	2.5	2	14,084
28	13	621,100	802	281	54.2		0.0	14	2.7		0.0	7	1.4		0.0		0.0	12	2.3	2	13,609
29	9	438,200	811	198	54.2		0.0	9	2.5		0.0	5	1.4		0.0		0.0	8	2.2	2	17,402
30	18	863,500	818	390	54.2		0.0	22	3.1		0.0	10	1.4		0.0		0.0	19	2.6	2	18,847
31	13	624,100	800	282	54.2		0.0	15	2.9		0.0	8	1.5		0.0		0.0	12	2.0	2	14,300
TOTAL	402	19,150,300	24,685	8,656.4	1,680.2			446.0	86.9			236.0	44.8					364.0	70.4	62.0	484,206
AVG	13	617,752	796	279.2	54.2			14.4	2.8			7.6	1.4					11.7	2.3	2	15,620

THIS PAGE IS OPTIONAL

PWSID NUMBER: WV 3301933

MONTH/YEAR: May 2022

ANALYTICAL RESULTS (mg/L)

DATE	Iron		Manganese		Phenolphthalein Alkalinity		Total Alkalinity		Calcium Hardness		(TDS) Total Dissolved Solids (Finished)	TEMP °F or C° (Finished)	(LSI) Langelier Saturation Index (Finished)	
	Raw	Finished	Raw	Finished	Raw	Finished	Raw	Finished	Raw	Finished				
1						57				88		17		
2						63				89		17		
3						58				91		17.8		
4						57				101		17.5		
5						66				96		17.4		
6						44				76		16.3		
7						40				67		18.4		
8						31				58		16.8		
9						23				50		13.6		
10						28				55		13.6		
11						40				64		16.1		
12						45				68		16.8		
13						46				78		18.3		
14						51				74		17.7		
15						54				80		18.3		
16						60				85		20.5		
17						63				86		20.3		
18						66				102		21.2		
19						68				120		24.4		
20						74				113		24.6		
21						82				114		20.5		
22						73				113		21.7		
23						74				114		21.9		
24						74				120		22.5		
25						77				125		21.5		
26						79				120		21.3		
27						79				128		21		
28						84				132		21.1		
29						85				131		21		
30						83				130		22.2		
31						77				121		22.6		
TOTAL						1901				2989		600.9		
AVG						61				96		19		

INDIVIDUAL FILTERS

If filter method is other than direct or conventional, please specify _____
(Please note, direct or conventional methods are required to complete the form below) (diatomaceous earth, slow sand, other)

1. Was each filter monitored continuously?

☑ Yes ☐ No

2. Were measurements recorded every 15 minutes?

☑ Yes ☐ No

3. Was there a failure of continuously turbidity monitoring equipment?

☐ Yes ☑ No

4. Were individual filter levels greater than 1.0 NTU in two consecutive measurements?

☐ Yes ☑ No

5. Were individual filter levels greater than 0.5 NTU in two consecutive measurements after online for more than four hours?

☐ Yes ☑ No

6. Were individual filter levels greater than 1.0 NTU in two consecutive measurements in three consecutive months?

☐ Yes ☑ No

7. Were individual filter levels greater than 2.0 NTU in two consecutive measurements in two consecutive months?

☐ Yes ☑ No

FILTER NUMBER	n/a
TURBIDITY MEASUREMENTS	n/a
DATE(S) AND TIME(S)	n/a

I certify the information recorded above is true and accurate to the best of my knowledge.

CERTIFIED BY: Charles Coe
Operator Printed Name Required

CERTIFIED BY: _____ Date: _____
Operator Signature Required

Certification # WVOP01358 Exp. Date 3/31/2024 Certification Class III

MONTHLY COMBINED FILTER EFFLUENT TURBIDITY REPORT

Required for Surface/GWUDI Systems

PWSID NUMBER: WV 3301933 **MONTH/YEAR:** May 2022

SYSTEM TYPE:(Check One) X Surface ____ GWUDI

SYSTEM NAME: Shepherdstown Water **PHONE NUMBER** 304-876-2394 **COUNTY** Jefferson

Please report NTU values to two decimal places (0.00)

DATE	TIME	NTU	TIME	NTU	TIME	NTU	TIME	NTU	TIME	NTU	TIME	NTU	#<=0.3	#>0.3	REMARKS
1	6am	0.050	10am	0.040									2		
2	6am	0.050	10am	0.040	2pm	0.040	6pm	0.040					4		
3	6am	0.050	10am	0.050	2pm	0.050							3		
4	6am	0.050	10am	0.040	2pm	0.040							3		
5	6am	0.050	10am	0.040	2pm	0.040							3		
6	6am	0.050	10am	0.050	2pm	0.050							3		
7	6am	0.070	10am	0.050	2pm	0.050							3		
8	6am	0.050	10am	0.050									2		
9	6am	0.030	10am	0.030	2pm	0.020	6pm	0.030					4		
10	6am	0.040	10am	0.030									2		
11	6am	0.060	10am	0.020	2pm	0.030	6pm	0.040	10pm	0.040			5		
12	6am	0.040	10am	0.040	2pm	0.040							3		
13	6am	0.040	10am	0.030	2pm	0.030	6pm	0.040					4		
14	6am	0.040	10am	0.030	2pm	0.030	6pm	0.040					4		
15	6am	0.050	10am	0.040									2		
16	6am	0.030	10am	0.030	2pm	0.030	6pm	0.040	10pm	0.040			5		
17	6am	0.040	10am	0.040	2pm	0.040	6pm	0.050					4		
18	6am	0.060	10am	0.060	2pm	0.040	6pm	0.050					4		
19	6am	0.060	10am	0.050	2pm	0.040	6pm	0.060	10pm	0.060			5		
20	6am	0.060	10am	0.050	2pm	0.050	6pm	0.060					4		
21	6am	0.070	10am	0.050	2pm	0.050	6pm	0.060					4		
22	6am	0.060	10am	0.060	2pm	0.050							3		
23	6am	0.060	10am	0.050	2pm	0.050	6pm	0.060					4		
24	6am	0.070	10am	0.050	2pm	0.050	6pm	0.050					4		
25	6am	0.060	10am	0.050	2pm	0.060	6pm	0.060					4		
26	6am	0.060	10am	0.070	2pm	0.050	6pm	0.060					4		
27	6am	0.070	10am	0.060	2pm	0.060	6pm	0.060					4		
28	6am	0.070	10am	0.060	2pm	0.060	6pm	0.060					4		
29	6am	0.080	10am	0.070	2pm	0.060							3		
30	6am	0.050	10am	0.050	2pm	0.050	6pm	0.050	10pm	0.060			5		
31	6am	0.070	10am	0.050	2pm	0.050	6pm	0.050					4		
													112		

*Slow sand: use 1 NTU in lieu of 0.3 NTU & diatomaceous earth: other filtration technologies as directed by agency

**Slow sand and diatomaceous earth; use 5 NTU in lieu of 1 NTU; other filtration technologies as directed

Total # of Samples 112

% < = 0.3 NTU x 100* = **100%**

GRAND TOTAL

Readings over 1 NTU** 0

Highest single turbidity reading 0.080

Lowest single turbidity reading 0.020

I certify the values recorded above are true and accurate to the best of my knowledge.

CERTIFIED BY: Charles Coe

(Certified Operator Printed Name Required)

(Certified Operator Signature Required) Date: _____

Certification #: WVOP01358 Exp. Date 3/31/2024 Certification Class III

Complete and return within 10 days after the end of the month to:
WV Office of Environmental Health Services - Data Management
350 Capitol Street, Room 313, Charleston, WV 25301-3713
Phone: (304) 558-2981 FAX: (304) 558-0139

EW 90B Revised 06/10

CONTINUOUS MONITORING

MONTHLY CHLORINE RESIDUAL REPORT - Required Surface and GUDI Sources

Required for Surface/GWUDI Systems

PWSID NUMBER: WV 3301933 MONTH/YEAR: May 2022

SYSTEM TYPE:(Check One) X Surface ____ GWUDI

SYSTEM NAME Shepherdstown Water PHONE NUMBER (304) 876-2394 COUNTY jefferson

Please report Chlorine Residual values to one decimal places (0.0)

DATE	TIME	CL. RES.	TIME	CL. RES.	TIME	CL. RES.	TIME	CL. RES.	TIME	CL. RES.	TIME	CL. RES.	TOTAL
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
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21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

# of Samples under 0.2 mg/l(free chlorine residual) 0 **Total # of Samples Taken**

I certify the values recorded above are true and accurate to the best of my knowledge.

CERTIFIED BY: Charles Coe
(Certified Operator Signature required)

_____ Date: _____
(Certified Operator Signature required)

Certification #: WVOP01358 Exp. Date March 31, 2024 Certification Class III

Complete and return within 10 days after the end of the month to:
WV Office of Environmental Health Services - Data Management
350 Capitol Street, Room 313, Charleston, WV 25301-3713
Phone: (304) 558-2981 FAX: (304) 558-0139

EW-90C Revised 06/10

QUARTERLY OPERATIONAL REPORT
DISINFECTION BYPRODUCT
PRECURSORS CONTROL
(GWUDI)

PWSID NUMBER: WV 3301933 **QUARTER/YEAR** 2022

(Required)

System Name Shepherdstown Water **County** Jefferson

Treatment Plant Name _____

Month	Source Water		Treated Water TOC (mg/L)	(A) Actual % TOC Removal	(B) Required% TOC Removal	(C) Removal Ratio (A) / (B)	Basis for Required % Removal
	ALK (mg/L)	TOC (mg/L)					
Total							
Annual Average							

CERTIFIED BY: _____

(Certified Operator's Printed Name Required)

_____ Date: _____

(Certified Operator's Signature Required)

Certification # _____ Exp. Date _____

Certification Class _____ Telephone Number _____

Complete and return within 10 days after the end of the quarter to:
WV Office of Environmental Health Services RD&C Unit
350 Capitol Street, Room 313, Charleston, WV 25301-3713
Phone: (304) 558-2981 FAX: (304) 558-0139

EW-80 Revised 02/05

FLUORIDATION REPORT
MONTHLY SUMMARY OF OPERATION

PWSID NUMBER: WV 3301933 (Required) **MONTH/YEAR:** May 2022

SYSTEM TYPE:(Mark One)

___ Ground x Surface ___ Ground Water Under the Influence of Surface Water

SYSTEM NAME Shepherdstown Water **PHONE NUMBER** 876-2394 **COUNTY** Jefferson

FLUORIDE CHEMICAL USED: HYDROFLUOSILICIC ACID **PURITY:** 23.5%

DATE	GALLONS OF WATER TREATED*	POUNDS/GAL OF CHEMICALS USED	ANALYTICAL RESULTS (mg/L)	
			PLANT EFFLUENT	DISTRIBUTION SYSTEM
1	397900.00	11.00	0.70	0.61
2	772100.00	17.00	0.69	0.72
3	531000.00	12.00	0.69	0.81
4	565300.00	9.00	0.70	0.69
5	600000.00	14.00	0.71	0.72
6	576800.00	15.00	0.68	0.70
7	590700.00	16.00	0.60	0.58
8	374600.00	10.00	0.61	0.55
9	742000.00	16.00	0.73	0.51
10	413300.00	9.00	0.73	0.66
11	819700.00	18.00	0.74	0.71
12	536200.00	14.00	0.76	0.69
13	769300.00	18.00	0.68	0.55
14	627300.00	14.00	0.72	0.68
15	391000.00	10.00	0.69	0.63
16	820000.00	19.00	0.67	0.61
17	681500.00	15.00	0.62	0.61
18	519600.00	12.00	0.60	0.55
19	660800.00	14.00	0.58	0.66
20	691100.00	17.00	0.59	0.72
21	631800.00	14.00	0.62	0.60
22	484700.00	12.00	0.63	0.58
23	805300.00	20.00	0.64	0.70
24	730000.00	16.00	0.62	0.74
25	630100.00	13.00	0.66	0.64
26	628800.00	15.00	0.65	0.81
27	612800.00	15.00	0.65	0.66
28	621100.00	14.00	0.66	0.63
29	438200.00	9.00	6.90	0.60
30	863500.00	22.00	0.61	0.64
31	624100.00	15.00	0.67	0.69
TOTAL	19,150,600.00	445.00	26.80	20.25
AVERAGE	617,761.29	14.35	0.86	0.65
HIGHEST READING			6.90	0.81
LOWEST READING			0.58	0.51

*Optional IF reported on EW-90/EW-103

I certify the values recorded above are true and accurate to the best of my knowledge.

CERTIFIED BY: Charles Coe
(Certified Operator Printed Name Required)

_____ DATE: _____
(Certified Operator Signature Required)

Certification#: WVOP01358 Exp. Date 3/31/2024 Certification Class III

Complete and return within 10 days after the end of the month to:
WV Office of Environmental Health Services - Data Management
Capitol and Washington Streets, 1 Davis Square, Suite 200, Charleston, WV 25301-1798
Phone: (304) 558-2981 FAX: (304) 558-0139