

AGENDA
New River Regional Water Authority
Thursday, March 16, 2023
10:00 a.m.
Conference Room
New River Regional Water Authority Water Plant
289 Kohler Avenue 289 Kohler Ave.
Austinville, Virginia 24312

A. INVOCATION AND PLEDGE OF ALLEGIANCE

B. CALL TO ORDER; ESTABLISHMENT OF QUORUM

C. CONSENT AGENDA

1. Minutes of the regular meeting of February 16, 2023

D. CITIZENS' TIME

E. VENDORS' TIME

F. APPROVAL OF INVOICES

1. AEP	February	\$20,429.46
2. Town of Wytheville	February	\$115,566.97
National Bank Balance: 2/28/23		\$241,038.51
VA Invest. Pool (VIP) 2/28/23		\$1.502M (+\$2,351.73)
Budget Remaining: 2/24/23		\$979,953 of \$2.723M

G. SUPERINTENDENT'S REPORT

H. BOARD TIME

1. Plant Expansion - Peed and Bortz

I. ADJOURNMENT

Minutes Signed?

MINUTES OF THE REGULAR MEETING OF THE NEW RIVER REGIONAL WATER AUTHORITY HELD IN THE COUNCIL CHAMBERS OF THE TOWN OF WYTHEVILLE MUNICIPAL BUILDING ON THURSDAY, FEBRUARY 16, 2023, AT 10:00 A.M.

Members present: Stephen D. Bear (Wythe County), Michael Watson (Carroll County), Candice N. Johnson (Wytheville), Cathy D. Pattison (Wytheville), Rex Hill (Carroll County), Rolland Cook (Wythe County), T. Brian Freeman (Wytheville)

Members absent: None

Others present: Zachary Slate, Philip Moore, Elvan Peed, Andrew Austin, Scott Bortz, Beth Taylor

RE: CALL TO ORDER, QUORUM

Chairman Freeman called the meeting to order and established that a quorum of Authority members was present.

RE: CONSENT AGENDA

Chairman Freeman presented the consent agenda consisting of the minutes of the regular meeting of January 26, 2023. He inquired if there was a motion to approve the consent agenda as presented. A motion was made by Secretary/Treasurer Bear and seconded by Mr. Hill to approve the consent agenda consisting of the minutes of the regular meeting of January 26, 2023, as presented. Chairman Freeman inquired if there was any discussion on the motion. There being none, the motion passed unanimously to approve the consent agenda consisting of the minutes of the regular meeting of January 26, 2023, as presented.

RE: CITIZENS' TIME

Chairman Freeman advised that the next item on the agenda is Citizens' Time. He inquired if there were any citizens present who wished to address the Authority during Citizens' Time. There being none, Chairman Freeman proceeded with the agenda.

RE: VENDORS' TIME

Chairman Freeman advised that the next item on the agenda is Vendors' Time. He inquired if there were any vendors present who wished to address the Authority during Vendors' Time. There being none, Chairman Freeman proceeded with the agenda.

RE: APPROVAL OF INVOICES

Chairman Freeman advised that the next item on the agenda is the Approval of Invoices, as follows:

1: AEP	January	\$25,364.29
2. Town of Wytheville	November	\$107,030.19

Chairman Freeman inquired if there was a motion to approve the payment of invoices as presented. Chairman Freeman inquired if there was anything of interest. Mr. Slate responded the water meter replacement cost was included. A motion was made by Secretary/Treasurer Bear and seconded by Ms. Johnson to approve the payment of invoices, as presented. Chairman Freeman inquired if there was any other discussion. There being none, the motion passed unanimously to approve the payment of invoices, as presented. Chairman Freeman then proceeded with the agenda.

RE: SUPERINTENDENT'S REPORT

The Superintendent's Report was entered into the record, as follows:

1. Expansion
2. Maintenance
3. Personnel

Mr. Slate reviewed discussions from the Operators and Lots Gap Tank meetings that were held on January 27, 2023. He then presented the following for the Authority to review:

1. Permanent repair to Raper Ridge Tank - \$38,550
2. TosiBox cybersecurity improvements quote - \$23,740
3. Automate Fort Chiswell Pump Station (FCPS)

After discussing the permanent repair to Raper Ridge Tank and reviewing budgetary items, a motion was made by Secretary/Treasurer Bear and seconded by Mr. Hill to authorize the Chief Operator to proceed with the permanent repair. Chairman Freeman inquired if there was any other discussion. Mr. Cooke and Mr. Watson inquired about details of the repair. After discussion, the motion passed unanimously to authorize the Chief Operator to proceed with the permanent repair.

Mr. Slate reviewed the TosiBox cybersecurity improvements. He emphasized the need for the improvements, but also expressed uncertainty of waiting till the Cybersecurity and Infrastructure Security Agency's (CISA) assessment is complete. After the Authority members discussed costs and the CISA assessment, a motion was made by Secretary/Treasurer Bear and seconded by Ms. Johnson to proceed with the cybersecurity improvements. Chairman Freeman inquired if there was any other discussion. Secretary/Treasurer Bear thanked Mr. Slate for his work on this. He stated cybersecurity isn't something we want to face, but it is a matter of when. After discussion, the motion passed unanimously proceed with the cybersecurity improvements.

Mr. Slate reported the conclusion from Operators Meeting was to fully automate FCPS. He stated there is an open purchase order to make changes at FCPS already but he has

requested the quote be updated to include fully automating operation.

Mr. Slate reported Elvan and I met with Ms. Priddy from the Department of Environmental Quality (DEQ) on January 31, 2023 to discuss the withdrawal permit. We have accepted the draft permit and advertised in the Wytheville Enterprise for public comments. Public comments will be closed March 13, 2023. Ms. Priddy anticipates us to receive the permit in early March 2023. Mr. Peed reported they made a couple minor changes to the permit. The changes include the formula for flow at the intake, the description of Austinville, and the history of the intake. He stated concerns regarding one of the agency comments about changing the screens from 2 millimeter (mm) to 1 mm, or the State standard. She ensures me that this was not DEQ's position, but the other agency. Mr. Peed concluded; the permit will be valid for fifteen (15) years or 2038. Chairman Freeman inquired if this this was for six (6) million gallons capacity. Mr. Peed confirmed the inquiry, stating that we can request to amend the permit capacity if we can demonstrate a need.

Mr. Slate reviewed various maintenance items underway and those that have been completed. This included flow meter calibrations, finish flow meter accuracy, and a yard hydrant repair. He reported Virginia Department of Health (VDH) was onsite February 9, 2023 for a site visit. He advised the site visit went well, and he will send the report once it is received. Mr. Slate noted that VDH encouraged testing hydrogen peroxide and adding ultrasonic algae control.

Mr. Slate followed up with an inquiry from last meeting, stating that insurance claim funds return to a revenue line-item called insurance recoveries. He concluded his report advising that January 2023 was the largest month to date by producing 81.21 million gallons or 2.62 million gallons per day.

Chairman Freeman inquired if there were any other comments. There being none, he proceeded to Board Time.

RE: BOARD TIME

Chairman Freeman opened the floor for board member comments.

Secretary/Treasurer Bear inquired if Mr. Slate would address the erosion at the entrance sometime this spring.

Vice-Chairman Watson complimented Mr. Slate for his work. Secretary/Treasurer Bear reported that he was appreciative to everyone involved in the Operators Meetings addressing items and making recommendations to the Authority board. Mr. Peed commented that it is a complex operation with three (3) utilities and the Authority. Talking and anticipating problems is what we do at those meetings. We are going to have them regularly the week before the second meeting of the quarter.

Mr. Peed discussed budgeting potential demand from localities and BlueStar. Secretary/Treasurer Bear stated the projection for the NBR plant is September/October 2023. Chairman Freeman reported the Town of Wytheville has undertaken a

compensation study, which included the New River Regional Water Authority. We anticipate salary modifications that we will report to you. Mr. Peed stated we will be conservative in projecting BlueStar production by moving it to the first quarter of 2024. Secretary/Treasurer Bear advised the glove plant will likely be under construction, but not operational in the upcoming budget year.

Mr. Peed stated there has not been an update on the Economic Development Authority grant.

RE: ADJOURNMENT

There being no further business to be discussed, a motion was made by Secretary/Treasurer Bear to adjourn the meeting. The motion passed unanimously and carried to adjourn the meeting. (10:30 a.m.)

T. Brian Freeman, Chairman

Stephen D. Bear, Secretary/Treasurer

Town of Wytheville

P.O. Box 533, 150 E. Monroe St.
 Wytheville, VA 24382
 276-223-3333 fax 276-223-3315

Invoice No.

1258

INVOICE

Customer

Name NEW RIVER REGIONAL WATER AUTHORITY
 Address _____
 City _____ State _____ ZIP _____
 Phone _____

Date 2/24/2023

Qty	Description	Unit Price	TOTAL
1	MONTHLY INVOICE FEBRUARY 2023 EXPENSES FOR FEBRUARY 2023	\$115,566.97	\$115,566.97
	NRRWA		

Payment Details

Check
 Check # _____

Make Checks
 Payable to: **Town Of Wytheville**

SubTotal	\$115,566.97
	\$0.00
TOTAL	\$115,566.97

Amount Due 30 Days from Invoice Date

--DETAIL--

--DETAIL--

FUND #-005 ** NRRWA EXPENSES **

MAJOR ACCT#	DESCRIPTION	BUDGET AMOUNT	APPR. AMOUNT	CURRENT AMOUNT	Y-T-D AMOUNT	ENCUMBRANCE AMOUNT	UNENCUMBERED BALANCE	% REMAIN.
999	** NRRWA EXPENSES **							
47000	NEW RIVER REG.WATER ADMINISTRATION							
1101	SALARIES AND WAGES REGULAR	377,401.00	377,401.00	31,872.70	245,914.94	.00	131,486.06	34.83
1102	SALARIES AND WAGES PART TIME	23,900.00	23,900.00	2,060.00	18,920.40	.00	4,979.60	20.83
1201	SALARIES AND WAGES OVERTIME	10,887.00	10,887.00	11.24	523.72	.00	10,363.28	95.18
2100	FICA	31,532.00	31,532.00	2,551.85	19,940.04	.00	11,591.96	36.76
2210	VRS	49,934.00	49,934.00	4,440.38	32,011.40	.00	17,922.60	35.89
2301	MEDICAL INSURANCE	92,052.00	92,052.00	5,975.40	45,913.04	.00	46,138.96	50.12
2401	GROUP INSURANCE	9,027.00	9,027.00	462.68	3,386.88	.00	5,640.12	62.48
2521	DISABILITY INSURANCE	.00	.00	265.28	1,667.91	.00	1,667.91	100.00
2601	UNEMPLOYMENT INSURANCE	387.00	387.00	.00	82.22	.00	304.78	78.75
2710	WORKER'S COMPENSATION	12,458.00	12,458.00	.00	10,077.00	.00	2,381.00	19.11
3110	PROFESSIONAL HEALTH SERVICES	400.00	400.00	.00	.00	.00	400.00	100.00
3130	O S PROFESSIONAL SERVICES	13,000.00	13,000.00	8,165.00	14,444.45	.00	1,444.45	11.11
3140	ENGINEERING SERVICES	325,000.00	325,000.00	.00	24,611.54	.00	300,388.46	92.42
3160	REPAIR MAINTENANCE O S VENDOR	50,000.00	50,000.00	4,299.84	43,825.87	.00	6,174.13	12.34
3161	O S INSTRUMENTATION SERVICES	10,000.00	10,000.00	.00	11,141.00	.00	1,141.00	11.41
3162	O S LABORATORY TESTING	4,100.00	4,100.00	693.74	1,371.74	.00	2,728.26	66.54
3163	O/S VENDOR - MOWING	5,500.00	5,500.00	.00	3,665.00	.00	1,835.00	33.36
3180	SLUDGE REMOVAL	30,000.00	30,000.00	.00	12,059.08	.00	17,940.92	59.80
3600	ADVERTISING	450.00	450.00	.00	.00	.00	450.00	100.00
3841	PYMT OF OTHER ENTITIES - WYTHE CO	1,000.00	1,000.00	115.50	390.50	.00	609.50	60.95
5111	ELECTRICAL SERVICES	200,000.00	200,000.00	25,364.29	154,309.88	.00	45,690.12	22.84
5231	TELECOMMUNICATIONS	8,000.00	8,000.00	596.08	4,842.05	.00	3,157.95	39.47
5302	FIRE/LIABILITY/PROPERTY INSURANCE	14,751.00	14,751.00	.00	14,781.00	.00	30.00	.20
5510	TRAVEL MILEAGE	1,400.00	1,400.00	.00	483.45	.00	916.55	65.46
5530	TRAVEL MEALS	500.00	500.00	.00	218.97	.00	281.03	56.20
5540	TRAVEL CONVENTIONS & EDUCATION	2,000.00	2,000.00	.00	945.00	.00	1,055.00	52.75
5810	PERMITS, LICENSES & MEMBERSHIPS	2,000.00	2,000.00	304.00	2,169.68	.00	169.68	8.48
6001	OFFICE SUPPLIES	1,200.00	1,200.00	39.99	378.06	.00	821.94	68.49
6004	LABORATORY SUPPLIES	6,000.00	6,000.00	717.87	2,569.42	.00	3,430.58	57.17
6005	JANITORIAL SUPPLIES	700.00	700.00	57.53	430.66	.00	269.34	38.47
6006	PROCESS CHEMICALS	188,000.00	188,000.00	26,721.75	113,788.26	.00	74,211.74	39.47
6007	MATERIAL & SUPPLIES	3,000.00	3,000.00	22.48	671.46	.00	2,328.54	77.61
6008	VEHICLE AND POWER EQUIPMENT SUPPLIE	7,000.00	7,000.00	143.74	4,143.84	.00	2,856.16	40.80
6009	MAINTENANCE EQUIPMENT	7,000.00	7,000.00	240.65	4,515.59	.00	2,484.41	35.49
6012	BOOKS AND SUBSCRIPTIONS	1,000.00	1,000.00	25.00	25.00	.00	975.00	97.50
6014	OTHER OPERATING SUPPLIES	1,000.00	1,000.00	.00	332.00	.00	668.00	66.80
6015	MINOR PLANT IMPROVEMENTS	2,000.00	2,000.00	.00	678.78	.00	1,321.22	66.06
6019	TOOLS AND SUPPLIES	400.00	400.00	.00	376.55	.00	23.45	5.86
6023	REPAIR/MAINTENANCE INSTRUMENTATION	1,500.00	1,500.00	384.00	624.00	.00	876.00	58.40
6027	SAFETY EQUIPMENT	3,000.00	3,000.00	35.98	1,033.58	.00	1,966.42	65.54
8000	CONTINGENCY	13,305.00	13,305.00	.00	.00	.00	13,305.00	100.00
8010	CONSTRUCTION COST	46,800.00	46,800.00	.00	9,002.96	.00	37,797.04	80.76
9100	SHARED DEBT SERVICE	254,082.00	254,082.00	.00	222,998.85	.00	31,083.15	12.23
9120	LOAN - U S BANK 2015A	788,881.00	788,881.00	.00	614,200.00	.00	174,681.00	22.14
9125	LOAN - U S BANK 2020C	122,666.00	122,666.00	.00	99,793.75	.00	22,872.25	18.64

--DETAIL--

--DETAIL--

FUND #-005 ** NRRWA EXPENSES **

MAJOR ACCT#	DESCRIPTION	BUDGET AMOUNT	APPR. AMOUNT	CURRENT AMOUNT	Y-T-D AMOUNT	ENCUMBRANCE AMOUNT	UNENCUMBERED BALANCE	REMAIN.
	NEW RIVER REG.WATER ADMINISTRATION							
	NEW RIVER REG.WATER ADMINISTRATION	2,723,213.00	2,723,213.00	115,566.97	1,743,259.52	.00	979,953.48	35.98
	NEW RIVER REG.WATER ADMINISTRATION	2,723,213.00	2,723,213.00	115,566.97	1,743,259.52	.00	979,953.48	35.98
	--FUND TOTAL--	2,723,213.00	2,723,213.00	115,566.97	1,743,259.52	.00	979,953.48	35.98



Statement Ending 02/28/2023

NEW RIVER REGIONAL WATER

Page 1 of 4

Account Number: [REDACTED]

RETURN SERVICE REQUESTED

>000994 3120861 0001 93499 10Z 23

NEW RIVER REGIONAL WATER AUTHO
PO BOX 966
WYTHEVILLE VA 24382-0966

0009391
#102



Connect With Us

- Mailing Address P O Box 90002
Blacksburg, VA 24062-9002
- Toll Free 1-800-552-4123
- Lost/Stolen Cards 1-800-951-6235
- Website Address www.nbbank.com
- Email Address custassist@nbbank.com

Summary of Accounts

Account Type	Account Number	Ending Balance
NOW - PUBLIC FUNDS	[REDACTED]	\$241,038.51

NOW - PUBLIC FUNDS-[REDACTED]

Account Summary

Date	Description	Amount
02/01/2023	Beginning Balance	\$1,814,764.56
	3 Credit(s) This Period	\$148,871.11
	3 Debit(s) This Period	\$1,722,597.16
02/28/2023	Ending Balance	\$241,038.51

Interest Summary

Description	Amount
Interest Earned From 02/01/2023 Through 02/28/2023	
Annual Percentage Yield Earned	1.06%
Interest Days	28
Interest Earned	\$962.01
Interest Paid This Period	\$962.01
Interest Paid Year-to-Date	\$2,629.11

Other Credits

Date	Description	Amount
02/01/2023	DEPOSIT	\$90,581.77
02/08/2023	DEPOSIT	\$57,327.33
02/28/2023	INTEREST	\$962.01
		3 item(s) totaling \$148,871.11

Other Debits

Date	Description	Amount
02/17/2023	PUBLIC TRUST ADV VIP LGIP VA-XX-XXXX-5001	\$1,500,000.00
		1 item(s) totaling \$1,500,000.00

Checks Cleared

Check Nbr	Date	Amount	Check Nbr	Date	Amount
1321	02/01/2023	\$107,030.19	1322	02/28/2023	\$115,566.97
				2 item(s) totaling \$222,597.16	

* Indicates skipped check number

Daily Balances

Date	Amount	Date	Amount
02/01/2023	\$1,798,316.14	02/17/2023	\$355,643.47
02/08/2023	\$1,855,643.47	02/28/2023	\$241,038.51





Summary Statement

February 28, 2023

Page 1 of 3

Investor ID: ●●●●●●●●

●●●●●●●●●●●●●●●●●●●●
New River Regional Water Authority
PO Box 966
Wytheville, VA 24382

Virginia Investment Pool

VIP Stable NAV Liquidity Pool

Average Monthly Yield: 4.7289%

	Beginning Balance	Contributions	Withdrawals	Income Earned	Income Earned YTD	Average Daily Balance	Month End Balance
●●●●●●●● Reserve Account	0.00	1,500,000.00	0.00	2,351.73	2,351.73	697,036.45	1,502,351.73
TOTAL	0.00	1,500,000.00	0.00	2,351.73	2,351.73	697,036.45	1,502,351.73

NRRINT

11840

Superintendent Notes

1. Expansion

- a. Confirmation given to Wythe County to proceed with permanent repair to Raper Ridge Tank. NRRWA issued PO on 2/22/23
- b. Cybersecurity: PO Issued for TosiBox System – in stock ready to order once closer to completing CISA assessment.
- c. Fully Automate FCPS quote pending
- d. Withdrawal permit
 - i. Public Comment Period: 2/11/23 – 3/13/23
 - ii. Anticipate Permit Early March

2. Maintenance

- a. Calibrated Chemical Feed Pumps
- b. Silt to be hauled to landfill in March.
- c. Ordered rock for erosion at gate.

3. Other

- a. VDH site visit 2/9/23 report attached.
- b. Confirmed can order less sodium permanganate to aid in tank cleaning and testing hydrogen peroxide.
- c. Consulting Blue Ridge Analytical to determine hydrogen peroxide dosage and performance.
- d. VDH was very accepting of piloting Hydrogen peroxide and recommended adding ultrasonic algae control.
- e. Old concession stand?
- f.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF HEALTH

OFFICE OF DRINKING WATER

Abingdon Field Office

407 E. Main Street, Suite 2
Abingdon, VA 24210
Phone: 276-676-5650
Fax: 276-676-5659

OFFICIAL ELECTRONIC MAIL: NO HARD COPY WILL FOLLOW

February 21, 2023

SUBJECT: Wythe County
Waterworks: New River Regional Water Authority
PWSID No.: 1197435

Mr. Brian Freeman, Chairman
New River Regional Water Authority
289 Kohler Avenue
Austinville, Virginia 24312

Dear Mr. Freeman:

On February 9, 2022, I conducted a technical assistance site visit of your waterworks. Enclosed is a copy of the report developed as a result of that site visit. Please note our list of comments and recommendations on page 3 of the site visit report. Additional items may be found in the body of the report.

There were two topics discussed which directly relates to the proposed upgrade of the treatment plant. The first topic is for the chlorine feed system to include a new solenoid valve that will close the chlorine feed pipe to the existing metering pumps when the metering pumps are not operating. These valves would ensure chlorine would not flow by gravity to on top of the filters when the chlorine tank is full and the plant is shut down. Currently operators must manually close the chlorine feed pipeline shutoff valve when they shut down the plant. Switching to peristaltic type metering pumps would also prevent this problem by eliminating a direct pathway from the chlorine tank to the feed point at the filters.

The second topic refers to the proposed improvements to two existing filters plus the addition of a new filter. We recommend the proposed upgrade project include a schedule for requiring the new filter to be installed and in service prior to making the improvements to the other two filters. This will allow the filter process to operate at a consistent flow rate up to 2.079 gpd/filter without having to adjust the raw water and finished water pumping rates.

Additionally, once the upgrade to 6 MGD is completed and all four filters are allowed to go into service, the operators should consider always keeping a clean filter out of service. Any three out of four filters will have the ability to provide a total filtration rate of 6.23808 MGD at the existing and proposed design 4 gpm/ft² filtration rate. This will allow operators to maintain the hydraulic flow through the entire plant when backwashing filters by allowing the clean filter to go into service when a dirty filter must be taken out of service for backwashing.

Finally, we look forward to reviewing the plans, specifications, and design notes for the proposed plant upgrade to 6 MGD.

If you have questions on the report or would like to discuss my findings, please do not hesitate to contact me. This office would like to thank the staff at the New River Regional Water Authority for their assistance and professionalism during the inspection.

Sincerely,

A handwritten signature in black ink that reads "Eric R. Herold". The signature is written in a cursive style and is positioned above the printed name.

Eric R. Herold, PE
District Engineer

ERH/mmw

Enclosure

cc: Zachary Slate – New River Regional Water Authority
VDH – ODW – Central Office

**VIRGINIA DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER
SURFACE WATER SYSTEM SITE VISIT**

SUBJECT: Wythe County
WATERWORKS: New River Regional Water Authority
PWSID: 1197435

GENERAL INFORMATION

Owner Name: New River Regional Water Authority	Waterworks Class: 2
Type of Waterworks: Community	
Contact Name: Brian Freeman, Chairman	
Contact Address: 289 Kohler Avenue, Austinville, Virginia 24312	
Contact Phone Number: (276) 699-8101	
Email Report to (recipients' email addresses): bfreeman@wytheville.org and newriverwater@gmail.com	

Present During Site Visit: Zachary Ryan Slate	License Class: 1
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Site Visit By: Eric R. Herold <i>ERH</i>	Site Visit Date: 2/9/2023
Time Spent: 4.0 hours	Last Sanitary Survey Date: 2/15/22
Date to Reviewer: 2/13/2023	Reviewed by/Date: <i>DZ</i> 2/16/2023
Date to Reviewer: 2/16/2023	Reviewed by/Date: <i>RBB</i> 2/17/23
Site Visit Type: Informal - Source Water Assessment – Complaint/Sampling Investigation – Construction - <u>Technical Assistance</u> – Enforcement Action Field Visit – Proposed Project Field Visit - Other	
Facilities Visited: Water Treatment Plant	

SUMMARY OF SITE VISIT

Outstanding Compliance/ Enforcement Discussed Not Applicable

Comments: Provided a copy of the next sample due printout. I showed the NRRWA staff how they can see sample results and sample schedules in Drinking Water Viewer. We also discussed how they can use Drinking Water Viewer to create the required Consumer Confidence Data table for their consecutive waterworks by the April 1st deadline.

UNIT PROCESS EVALUATIONS

Rapid/Static Mixer(s) - Not Inspected

General performance: satisfactory needs attention
Physical condition of unit: satisfactory needs attention

Comments: Train 1 SCM = +5 ; Train 2 SCM = +13. I discussed how many waterworks with SCM have found they need to maintain a stable alkalinity when trying to use the SCM to optimize coagulant dosages. The operators had noticed how alkalinity affected the SCM readings.

Flocculation/Slow Mix - Not Inspected

General performance: satisfactory needs attention
 Physical condition of unit: satisfactory needs attention

Comments: Flocculator speeds set at 18 rpm, 15 rpm, 11 rpm. Last cleaned #1 11/22/22; #2 11/9/22 – Due in March.

Sedimentation - Not Inspected

Last cleaned: #1 11/22/22; #2 11/9/22 – Due in March

General performance: satisfactory needs attention
 Physical condition of unit: satisfactory needs attention

Comments: The flocculation and sedimentation basins are scheduled for cleaning in March.

Filtration - Not Inspected

General performance: satisfactory needs attention
 Physical condition of unit: satisfactory needs attention

Comments: Reminded operator to calibrate filter controls, rate-of-flow indicators/recorders during 2023.

Filter 1, drop/rise test on 10/30/22., Expansion Test 12/30/22. Filter 2 drop/rise on 10/9/22; Expansion on 11/14/22.

Filter 3 drop/rise test on 11/15/22; Expansion test on 11/22/22. We discussed the sequence for adding the new filter and rehabilitating the 2 older filters. They intend to complete the addition of the new filter before taking the old filters out of service for rehab so that production will remain the same throughout the proposed upgrade project. I also recommended they consider always keeping a clean filter out of service at all times so that it may be placed into service while they backwash a filter so that production does not vary.

FINISHED WATER FACILITIES

Clear Well - Not Inspected

Physical condition of unit: satisfactory needs attention

Finished water pumps - Not Inspected

Physical conditions: satisfactory needs attention

CHEMICAL FEED FACILITIES - Not Inspected

Physical condition of chemical feed facilities: satisfactory needs attention

Comments: Chemical feeders were all calibrated in January 2023. The operators had recently discovered when they fill the bulk chlorine tank full the piping to metering pumps will allow the weight of chlorine to continue to deliver chlorine to on top of the filters creating a high chlorine dose on top of the filters when they are not operating. The chloring tank overflow is 1-2 feet higher than the water level on top of the filters. To solve this problem they must shut off the feed pipe to the chlorine pumps. I recommended they install a solenoid on the feed pipe to the metering pumps linked to shut when the metering pumps are not in service.

OPERATIONAL/PERFORMANCE DATA - Not Inspected

Constant Monitoring Equipment	Operable	Inline Reading	Constant Monitoring Equipment	Operable	Inline Reading
raw pH	Yes	7.2	filter 1 turbidity	Yes	0.023
applied pH	Yes	7 & 7.6	filter 2 turbidity	Yes	0.019
finished pH	Yes	7.38	Filter 3 turbidity	Yes	0.022
raw turbidity	Yes	5.8	finished turbidity	Yes	0.034

Constant Monitoring Equipment	Operable	Inline Reading	Constant Monitoring Equipment	Operable	Inline Reading
sed basins turbidity	Yes	0.65 & 0.51	finished chlorine	Yes	1.99

PROBLEMS IDENTIFIED AT LAST INSPECTIONS	CORRECTED?
2/22-1: Repair broken airline to a raw water intake screen.	Not Inspected
2/22-2: Repair broken fluoride metering pumps or obtain a new backup metering pump. Funding a new pump may be available through the VDH Oral Health Community Fluoridation Program by completing an application found at: https://www.vdh.virginia.gov/oral-health/cwf/fluoridation-grant-funding/	Not Corrected Reminded to request funding.
2/22-3: Cleaning both sedimentation basins as soon as the weather permits should be completed before excess sludge causes short circuiting through these basins.	Completed
2/22-4: Complete the required annual calibration of the sodium permanganate and DelPac 1000 metering as soon as possible since it has been more than a year since these have been calibrated.	Completed
2/22-5: A Waterworks Business Operations Plan including an Asset Management Plan should be developed at this waterworks since much of the equipment is 12 years old and may need major maintenance and/or replacement. Forms may be found at: https://www.vdh.virginia.gov/drinking-water/odw-forms/	Not Completed
2/21-2: Alert the Abingdon Field Office on any updates or progress with your VWP update with DEQ. If the intake screens must be changed, plans, specifications, and design notes developed by a Virginia licensed professional engineer must be submitted to this Office for review and approval.	Still waiting for DEQ to process application

Total Production									
2023	NRRWA	%	Wytheville	%	Wythe Co.	Carroll Co.	Total	Avg/Day	%
Jan	81.21 MG	10	75.27 MG	-4	1.75 MG	2.70 MG	160.92 MG	5.36 MG	1.7
Feb	63.69 MG	-8	67.09 MG	-6	1.50 MG		132.29 MG	4.41 MG	-8.7
Mar									
Apr									
May									
Jun									
July									
Aug									
Sept									
Oct									
Nov									
Dec									
Total	144.9 MG		142.4 MG		3.25 MG	2.70 MG	293.22 MG	0.80 MG	

