

AGENDA FOR THE REGULAR MEETING OF THE
NEW RIVER REGIONAL WATER AUTHORITY
HELD AT THE TOWN OF WYTHEVILLE,
MUNICIPAL BUILDING
IN WYTHEVILLE, VIRGINIA
THURSDAY, April 18, 2019, AT 10:00 A.M.

RE: CALL TO ORDER, QUORUM

RE: INVOCATION AND PLEDGE OF ALLEGIANCE

RE: CONSENT AGENDA

RE: CITIZENS' TIME

RE: VENDOR TIME

RE: APPROVAL OF INVOICE

1. AEP
2. Town of Wytheville
3. Wythe County

\$13,842.42
~~\$49,668.72~~ 49,688.72
\$22,648.07 (February)
\$25,112.61 (March)

RE: CHIEF OPERATOR'S REPORT

1. DEQ Inspection
2. Safety
3. Mr. Farmer Class 2 Exam
4. Process Chemical Prices
5. New Raper Ridge Tank
6. Budget Meeting
7. Turbidimeters

RE: BOARD TIME

Chief Operators Notes

1. Mrs. Patti Higgins, with DEQ, was onsite March 25th to conduct an inspection in reference to our withdrawal permit (VWP 04-2106). She reviewed records, the permit, and conducted a walkthrough of locations pertaining to the permit. This permit will expire on January 8, 2021. A new application will have to be sent in 180 days prior of the expiration towards a re-issuance of the permit. Mrs. Higgins noted that we may have to update our screens on the intake structure in the river to a 1mm mesh vs the current 2mm openings before the permit will be reissued. The main 2 pages of the report are attached to your board packet. There were no deficiencies noted other than the current screens.
2. VACORP sent me an online safety training program which I have started using as of April. Mr. Jim McClellan from VACORP was onsite 4/10/19 to conduct a type of mock OSHA walkthrough of the facility. We discussed a variety of safety related items and ideas. Two of the major items discussed were the dechlorination pit and the raw well at the river pump station.
 - a. He suggested that we make sure that the contractor that enters the raw well has workers comp. insurance and that we have a copy of it.
 - b. The dechlorination pit at the plant is a confined space as well as a fall hazard. The operators are currently entering the pit to check or fill the dechlorinators regularly. Mr. McClellan did not have an easy or cheap solution to minimize risk. Ideally operators would never have to enter the space. He suggested exploring options to move the dechlorination point. I have contacted Mr. Peed about this. I do believe we can find another point before or after the dechlorination pit that would be safer to service. Mr. McClellan will be sending a report of his findings.
 - c. One PPE suggestion he had was safety toe shoes for the operators. If safety toe shoes are required, I suggest that the NRRWA cover part of this. This is one item in which the employer does not technically have to purchase, as they can be used

outside of work. This will be an item I plan to discuss during the budget meeting.

- d. Throughout the facility there are many confined spaces. Mr. McClellan recommends checking the atmosphere of these areas and building a log of the results. He suggested starting weekly and then decreasing the frequency or as there are process changes. Our current gas meter was found inoperable. I purchased a battery which allowed it to turn on, only to find that the oxygen sensor was bad. The meter is no longer supported by the manufacturer which means we will need to purchase a new gas meter. (est. \$1000)
3. Mr. Joe Farmer has taken his class 2 again and PASSED on 4/11/19.
4. We are going to be over budget on process chemicals for this FY. (Est. \$35-36,000) I have begun comparing process chemical prices from Lighthouse Chemicals, Brenntag, and Surry Chemicals. A comparison is attached. We haven't used Surry in the past, but their prices look promising. Mr. Roger Gravely general manager of Surry Chemicals was onsite 4/11/19 to discuss our recent chemical quotes. He quoted a new chemical (Surchem ELTH) for dechlorinating that may alleviate the need to enter the dechlorination pit as well as be a cheaper option. I plan to discuss this further with Elvan Peed and Russell Jackson at the operators meeting, tentatively scheduled for May 8th, 2019.
5. The majority of the new Raper Ridge Tank filling began on March, 26th 2019. The Town of Wytheville worked 2 night shifts during this process as the Fort Chiswell pump station was turned off. Thank you to those operators for the extra work. We only had to work late one night. The tank was put online 4/16/19.
6. Mr. Peed and Mr. Jackson were onsite March 28, 2019 to discuss the plant operations and budget. I enjoyed meeting with them and our discussion. It was very informative and helpful to me. We hope to have the budget ready by the May meeting.
7. I have been working on inline turbidity meter quotes and hope to order them soon.

**MINUTES OF THE REGULAR MEETING OF THE
NEW RIVER REGIONAL WATER AUTHORITY
HELD AT THE TOWN OF WYTHEVILLE,
MUNICIPAL BUILDING IN WYTHEVILLE, VIRGINIA
THURSDAY, March 21, 2019 AT 11:00 A.M.**

Members present: Stephen Bear (Wythe County), C. Wayne Sutherland, Jr. (Wytheville), Jessica Montgomery (Carroll County), Steve Truitt (Carroll County), Joseph E. Hand, Jr. (Wytheville), Gene Horney (Wythe County)

Members absent: Tim Reeves (Wythe County),

Others present: Jonathan Hanks, Beth Taylor, Evlan Peed, Zachary Slate,

RE: CALL TO ORDER, QUORUM

Chairman Bear established that a quorum of Authority members was present and called the meeting to order at 11:04 a.m.

RE: INVOCATION AND PLEDGE OF ALLEGIANCE

Ms. Montgomery led those present in the invocation, followed by the Pledge of Allegiance.

RE: CONSENT AGENDA

Chairman Bear presented the Consent Agenda consisting of the minutes of the regular meeting of February 21, 2019 to the Authority members for approval. Chairman Bear inquired if there was any discussion on the minutes as presented. Mr. Sutherland made a motion, which was seconded by Mrs. Montgomery, to approve the Consent Agenda including the minutes of the February 21, 2019 meeting. The motion passed unanimously with all members present voting to approve the Consent Agenda, including the minutes of the February 21, 2019 meeting.

RE: CITIZENS' TIME

Chairman Bear inquired if there were any citizens present with topics of discussion during the meeting. With no one to address the Authority, Chairman Bear proceeded with the agenda.

RE: VENDOR TIME

Chairman Bear inquired if there were any vendors present who wished to address the Authority. There being no vendors to address the Authority, Chairman Bear proceeded with the agenda.

RE: APPROVAL OF INVOICES

Chairman Bear advised that the next item on the agenda was the Approval of the Invoices as follows:

- | | |
|-----------------------|---------------------|
| 1. AEP | \$13,759.41 |
| 2. Town of Wytheville | \$70,119.27 |
| 3. Wythe County | \$20,562.83 |
| 4. Enel X | \$2,196.99 (Credit) |

Chairman Bear inquired if there was any discussion on the invoices presented. There being no discussion, Chairman Bear inquired if there was a motion to pay the invoices. A motion was made by Mr. Horney and seconded by Mr. Hand to pay the invoices as presented. The motion passed unanimously with all members present voting to pay the invoices.

RE: CHIEF OPERATOR'S REPORT

Chairman Bear turned the meeting over to Mr. Zachary Slate.

Mr. Slate reported Lagoon #1 was cleaned by the plant operators in conjunction with LUSK Disposal Service to haul off and dispose of silt. Previously, the operators were using V&M Regional Recycling, to haul all the silt disposal, but they were unable to do the work. This put plant maintenance behind. While V&M was cheaper, LUSK was available. We've been using LUSK for this which has pushed the budget over for silt removal Lagoon #1 now clean and has a new layer of sand and is back in service.

Mr. Slate reported Mr. Eric Herold emailed a summary of the water quality results for the year 2018. I have attached this in the board packet. There were no violations noted.

Mr. Slate reported we received the report from our plant inspection on 2/5/19, which was conducted by Mr. Eric Herold with VA Dept. of Health, Office of Drinking Water. Mr. Slate has included his comments from this inspection as well as the summary of problems identified in previous inspections [in the board packet]. We have already corrected several of these items such as, repairing the inline pH meter, ordered new primary standards for the inline turbidity meters, and performing the required filter tests.

Mr. Slate reported a replacement fluoride meter has been ordered. The VDH will be reimbursing us for this purchase. Jonathan initiated this process. Mr. Slate thanked him for this.

Mr. Slate reported the bidding process for the 2019 ground maintenance contract ended as of March 8th, 2019. Only 2 Bids were received. Jackson Lawn Care came in with the lowest offer at \$285/session and was awarded the bid. The 2 bids are in the packet as well.

Mr. Slate reported VA Heating and Cooling were on site 3/1/2019. Our new heat pump was making noise. Upon investigation we found it to be severely iced up to the point of damaging the fan blades. VA Heating and Cooling ordered new fan blades and put them on 3/21/19. During the time in between we had to run emergency heat. Hopefully that has corrected the problem. VA Heating and Cooling asked us to keep an eye on it daily. If they become iced up again, they may have to revisit.

Mr. Slate reported in an effort to keep the operators safe and compliant I have been ordering various PPE for each operator. After discussing with the operators how we were handling the sodium permanganate barrels, I ordered longer tubing for the chemical pump. I am hope this will allow us to pump the solution from outside the building versus moving the big heavy barrel inside the building over a ramp. The tubing is in and Mr. Slate thinks it will work. Mr. Slate invited VACORP to help with a safety program and identify hazards at the plant. Kathleen Guzi and Chris Ballard visited on 3/14/2019. The meeting was informative of their services. They plan to have a follow up walk through to customize training and safety policies to our facility and operators.

Mr. Slate reported Joe Farmer will be taking his class 2 exam on March 27, 2019.

Mr. Slate also reported the new Raper Ridge Tank is to be filled on March 26, 2019. There is a meeting to be held at NRRWA with Scott Bortz and those involved on March 25th at 10am to coordinate the filling procedure.

Lastly, Mr. Slate reported Patti Higgins with DEQ will be onsite March 25, 2019 to do an inspection in reference to our water withdraw permit and the documentation associated with it.

Chairman Bear asked if there were any questions.

Mr. Peed made mention that the withdrawal permit maybe close to renewal. It is a 15 year term.

Chairman Bear congratulated the staff on a good VDH inspection, and commented that Wythe County has been approved for the generator project, hazard mitigation, for the Fort Chiswell pump station. The award amount was \$115,000 (+/-) for the generator. They will be moving forward with it and have a year to finish it. This is an item to check off the list for the health department.

Discussion was made that the generator should show up on the SCADA system at NRRWA.

Ms. Montgomery commented that she was glad to hear that the NRRWA had a good start on the VDH list from the inspection.

Chairman Bear thanked Mr. Slate for working on safety. He also made mention that we do

need you to work on the budget.

Mr. Elvan Peed commented on the budget. He plans to meet with the operators Thursday to go over the budget and hopes to maintain the \$1.25 rate. He will send the draft to everybody.

Chairman Bear proceeded with the agenda.

RE: BOARD TIME

Chairman Bear inquired if there were any other items of discussion that needed to come before the Authority.

Chairman Bear mentioned that though it could be a long time off, Smith County has approached us [Wythe County] and is strongly interested in interconnecting with us. They are working on grant funding and feasibility. The interconnect with them would involve discussion about the current water source/use agreement in place, as well as discussion within the county, Rural Retreat, Wytheville, and the NRRWA. This is on the radar and being studied for feasibility. They would like to have another source of water and we have one of the best around.

Ms. Montgomery reported that Mr. Truitt and I have been approached by the Town of Fries [for water]. They do not know what it would consist of. The first meeting is next week.

Chairman Bear proceeded with the agenda to the agenda.

RE: CLOSED SESSION

Chairman Bear inquired if there were any items to discuss under closed session. There being none, Mr. Bear proceeded with the agenda.

RE: ADJOURNMENT

Chairman Bear inquired if there is any other business to come before the Authority. There being no other business, a motion was made, seconded, and carried to adjourn the meeting at 11:19 a.m.

Stephen Bear, Chairman

Steve Truitt, Secretary/Treasurer

Town of Wytheville

P.O. Box 533, 180 E. Monroe St.
Wytheville, VA 24382
276-223-3333 fax 276-223-3315

Invoice No.

972

INVOICE

Customer

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

Date **4/1/2019**

Qty	Description
	MONTHLY INVOICE-MARCH 2019
1	EXPENSES FOR MARCH 2019

Unit Price	TOTAL
\$49,688.72	\$49,688.72

NRRWA

Payment Details

☒ Check
Check # _____

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

SubTotal	\$49,688.72
TOTAL	\$49,688.72

Amount Due 30 Days from Invoice Date



Finance Director's Office
340 South Sixth Street – Administration Building
Wytheville, VA 24382-2598
Telephone (276) 223-4526
FAX (276) 223-4515

Bruce Grant M.B.A.
Finance Director

April 5, 2019

INVOICE

New River Regional Water Authority
Attn: Mr. Jonathan Hanks
Post Office Box 533
Wytheville, VA 24382

Please accept this letter as an invoice for the New River Regional Water Authority payroll cost for the month of February 2019.

Monthly Operations of Payroll for NRRWA	\$22,648.07
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Adjustments:

Net Billable Expenses	\$22,648.07
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Total Due	\$22,648.07
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If you have any questions, please feel free to call.

Sincerely,

Bruce Grant
Finance Director

CC: Mr. Michael Stephens



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glytdbud

04/05/2019 11:17
4952bgrant
Mythe County
YEAR-TO-DATE BUDGET REPORT

FOR 2019 08

ACCOUNTS FOR:
1100 General Fund

	ORIGINAL APPROP	REVISED BUDGET	YTD EXPENDED	MTD EXPENDED	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
44013 New River Regional Water Autho							
44013 411100 SALARIES	172,069	172,069	153,336.92	15,432.58	.00	18,732.08	89.1%
44013 412100 PART-TIME PAY PERSONN	16,952	16,952	.00	.00	.00	16,952.00	.0%
44013 413300 OVERTIME PAY	5,336	5,336	9,449.27	2,227.14	.00	-4,113.27	177.1%
44013 421100 HEALTH INSURANCE - AN	37,434	37,434	24,273.00	2,593.00	.00	13,161.00	64.8%
44013 421120 VRS - GROUP LIFE EMPL	895	895	632.98	63.84	.00	262.02	70.7%
44013 421130 HYBRID DISABILITY (42	287	287	223.84	32.80	.00	63.16	78.0%
44013 422100 FICA	14,868	14,868	11,691.49	1,271.21	.00	3,176.51	78.6%
44013 423100 VRS - RETIREMENT	14,247	14,247	10,324.93	1,016.46	.00	3,922.07	72.5%
44013 423150 VRS - RETIREE HEALTH	155	155	112.71	11.04	.00	42.29	72.7%
44013 425100 UNEMPLOYMENT INSURANC	456	456	6.57	.00	.00	449.43	1.4%
44013 426100 WORKERS COMPENSATION	7,808	7,808	5,890.15	.00	.00	1,917.85	75.4%
TOTAL New River Regional Water Au	270,507	270,507	215,941.86	22,648.07	.00	54,565.14	79.8%
TOTAL General Fund	270,507	270,507	215,941.86	22,648.07	.00	54,565.14	79.8%
TOTAL EXPENSES	270,507	270,507	215,941.86	22,648.07	.00	54,565.14	



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340 South Sixth Street – Administration Building
Wytheville, VA 24382-2598
Telephone (276) 223-4526
FAX (276) 223-4515

Bruce Grant M.B.A.
Finance Director

April 5, 2019

INVOICE

New River Regional Water Authority
Attn: Mr. Jonathan Hanks
Post Office Box 533
Wytheville, VA 24382

Please accept this letter as an invoice for the New River Regional Water Authority payroll cost for the month of March 2019.

Monthly Operations of Payroll for NRRWA	\$25,122.61
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Adjustments:

Net Billable Expenses	\$25,122.61
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Total Due	\$25,122.61
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If you have any questions, please feel free to call.

Sincerely,

Bruce Grant
Finance Director

CC: Mr. Michael Stephens



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glytdbud

04/05/2019 11:16
4952bgrant
Wythe County
YEAR-TO-DATE BUDGET REPORT

FOR 2019 09

ACCOUNTS FOR:
1100 General Fund

	ORIGINAL APPROP	REVISED BUDGET	YTD EXPENDED	MTD EXPENDED	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
44013 New River Regional Water Autho							
44013 411100 SALARIES	172,069	172,069	153,336.92	17,604.52	.00	18,732.08	89.1%
44013 412100 PART-TIME PAY PERSONN	16,952	16,952	.00	.00	.00	16,952.00	.0%
44013 413300 OVERTIME PAY	5,336	5,336	9,449.27	111.75	.00	-4,113.27	177.1%*
44013 421100 HEALTH INSURANCE - AN	37,434	37,434	24,273.00	3,231.00	.00	13,161.00	64.8%
44013 421120 VRS - GROUP LIFE EMPL	895	895	632.98	84.42	.00	262.02	70.7%
44013 421130 HYBRID DISABILITY (42	287	287	223.84	31.76	.00	63.16	78.0%
44013 422100 FICA	14,868	14,868	11,691.49	1,274.08	.00	3,176.51	78.6%
44013 423100 VRS - RETIREMENT	14,247	14,247	10,324.93	1,301.10	.00	3,922.07	72.5%
44013 423150 VRS - RETIREE HEALTH	155	155	112.71	14.12	.00	42.29	72.7%
44013 425100 UNEMPLOYMENT INSURANC	456	456	6.57	.00	.00	449.43	1.4%
44013 426100 WORKERS COMPENSATION	7,808	7,808	5,890.15	1,469.86	.00	1,917.85	75.4%
TOTAL New River Regional Water Au	270,507	270,507	215,941.86	25,122.61	.00	54,565.14	79.8%
TOTAL General Fund	270,507	270,507	215,941.86	25,122.61	.00	54,565.14	79.8%
TOTAL EXPENSES	270,507	270,507	215,941.86	25,122.61	.00	54,565.14	



100 South Main Street
P.O. Box 90002
Blacksburg, Virginia 24062-9002
540-552-2011 • 800-552-4123
www.nbbank.com

ACCOUNT:

7511173 03/29/2019

*****AUTO**ALL FOR AADC 240
3979 0.5890 AB 0.412 14 2 209
NEW RIVER REGIONAL WATER AUTHO
PO BOX 966
WYTHEVILLE VA 24382-0966

30-0
3
0

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LOCAL BANK. PERSONAL SERVICE.

=====

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NOW - PUBLIC FUNDS ACCOUNT 7511173

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LAST STATEMENT 02/28/19 1,716,864.42
4 CREDITS 62,438.43
DEBITS .00
THIS STATEMENT 03/29/19 1,779,302.85

----- DEPOSITS -----

REF #	DATE	AMOUNT	REF #	DATE	AMOUNT	REF #	DATE	AMOUNT
	03/07	2,196.99		03/18	20,095.63		03/19	37,863.06

----- OTHER CREDITS -----

DESCRIPTION	DATE	AMOUNT
INTEREST	03/29	2,282.75

----- I N T E R E S T -----

AVERAGE LEDGER BALANCE:	1,741,284.14	INTEREST EARNED:	2,282.75
INTEREST PAID THIS PERIOD:	2,282.75	DAYS IN PERIOD:	29
INTEREST PAID 2019:	6,922.52	ANNUAL PERCENTAGE YIELD EARNED:	1.66%
INTEREST RATE:	1.6500%		

----- ITEMIZATION OF OVERDRAFT AND RETURNED ITEM FEES -----

	TOTAL FOR	TOTAL	*
	THIS PERIOD	YEAR TO DATE	*

* TOTAL OVERDRAFT FEES:	\$.00	\$.00	*

* TOTAL RETURNED ITEM FEES:	\$.00	\$.00	*

* * * C O N T I N U E D * * *



NOTICE: SEE REVERSE SIDE FOR IMPORTANT INFORMATION





100 South Main Street
P.O. Box 90002
Blacksburg, Virginia 24062-9002
540-552-2011 • 800-552-4123
www.nbbank.com

ACCOUNT:

7511173 03/29/2019

NEW RIVER REGIONAL WATER AUTHO

NOW - PUBLIC FUNDS ACCOUNT 7511173

DATE.....	BALANCE	DATE.....	BALANCE	DATE.....	BALANCE
03/07	1,719,061.41	03/19	1,777,020.10		
03/18	1,739,157.04	03/29	1,779,302.85		



NOTICE: SEE REVERSE SIDE FOR IMPORTANT INFORMATION

Mark
Pine

VWP GENERAL INSPECTION REPORT

Site or Project Name: New River Water Authority

Permit #: 04-2106

Section 1 – General Information

Inspection Information			
Inspector: Patti Higgins	Inspection Date 03-25-2019	Arrived On Site: 11:50 a.m.	
Weather Conditions: partly cloudy/overcast - rain forecasted			
On-site Reps: Zackary Slate, Chief Operator			
Site Information			
Permit Issued: 01-06-2006	Modification #	Issued: None	Expires: 01-08-2021 – <i>re-apply in 2020</i>
Site or Project Name: New River Water Authority			Contact Name: Zackary Slate
Site Physical Location: Intake on the New River 0.37 miles west of St.Rt. 636			Contact Phone: ()
City: Austinville			County: Wythe
Permittee Information			
Contact or Responsible Party: New River Water Authority – Mount Rogers Planning Dist.			Phone: ()
Address: 1021 Terrace Drive			
City: Marion	County: Smyth	State: Virginia	Zip: 24354

Section 2 – Complaint, Observations & Recommendations

Description of the Complaint
N/A

Observations During On-Site Inspection	
1.	The permit was issued to increase the water withdrawal from 4 MGD to 10 MGD through an existing intake on the New River. No construction activities were authorized by the permit.
2.	<p>Part I – Special Conditions – A. Authorized Activities #4 states:</p> <p><i>The current intake screen has a mesh size of 2 millimeters and intake velocity of 0.164 feet per second. Should the need arise to enter the stream for major repairs or renovations, the intake screens shall be updated to meet guidelines in effect at the time of permit modification. Currently the design guidelines require screen openings no larger than 1 millimeter in width and screen face intake velocities no greater than 0.25 feet per second....</i></p> <p><u>December 19, 2014</u> the stream was entered to make repairs on the raw water intake structure as stated in a letter Dated January 5, 2015 from Marine Solutions, Inc. (MSI). (Letter Attached).</p> <p>The record of the repairs/maintenance performed on December 19, 2014 done by MSI it would appear that this would have been the prime time to update the screen to meet the regulatory standards and comply with the condition of the permit. This was not completed and the screen and velocity are still at 2 millimeters/0.164 velocity per second.</p> <p>The permit will expire in January 2021, the facility will need to re-apply for a permit in 2020. The facility should be aware that this is an issue that should be corrected and the facility should prepare and work to complete this requirement.</p>
3.	The raw water withdrawal records were collected and reviewed for January, July, November 2016, and January and March 2019. The records indicate the facility had not exceeded the permitted withdrawal of 10 MGD.

VWP GENERAL INSPECTION REPORT

Site or Project Name: New River Water Authority

Permit #: 04-2106

Request for Action Items (Written Response Required)

The permit will expire in January 2021, the facility will need to re-apply for a permit in 2020. The facility should be aware that this is an issue that should be corrected and the facility should prepare and work to complete this requirement. Once the screen(s) have been replaced a written notification or email should be submitted to the DEQ.

General Recommendations (No Response Required)

See above.

Section 3 – Summary

Inspection Summary

-The conditions of the permit were reviewed with the facility representative, records were collected and reviewed, photos were taken and no compliance issues were noted during the on-site inspection.
-It is being advised that the facility prepare to have the screen(s) replaced to meet the current regulatory requirements.

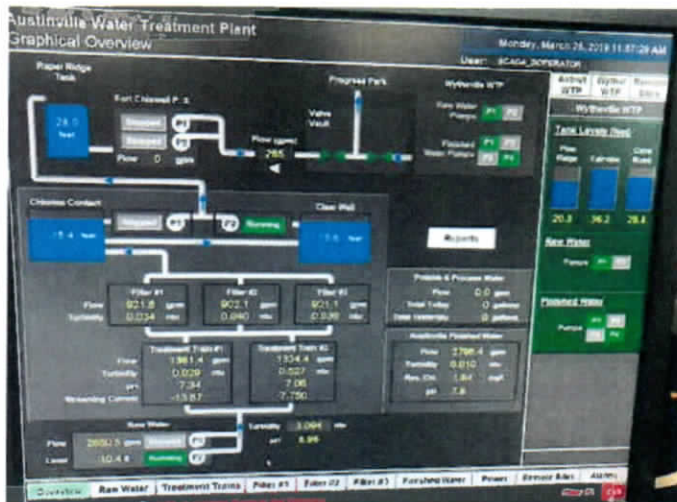
Photo(s) Attached?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	How many photos?	2	Graphics Attached?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
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Section 4 –Photos & Graphics

Photo #1 – New River Intake area (intake under water)



Photo #2 – Monitor (snapshot)



Recommendations or corrective actions:

☒ No compliance issues observed – no further action. **-OR-** ☐ Yes, compliance issues noted - further action required.

Inspector: *Patty Dwyer*

Date: 4-2-2019

Manager: *[Signature]*

Date: 4-5-2019

Process Chemical Prices

Process Chemical	Surry Chemicals			Lighthouse Chemical			Brenntag Mid-South			Control Equip. Company		
	lb	gal	Order	lb	gal	Fee	lb	gal	Fee	lb	Fee	Order
Sodium Hypochlorite 12.5%		\$ 0.98	\$ 4,410.00		\$ 1.25			\$ 1.783	\$ 244.00			
DelPac 2020 (Bulk)				\$ 0.315								
DelPac 2020 (Single Barrel)	\$ 0.62		\$ 341.00	\$ 0.680								
DelPac 2020 (Multiple Barrels)	\$ 0.62		\$ 5,653.78	\$ 0.680								
Hydrofluosilicic Acid 23%	\$ 0.40		\$ 2,640.00							\$ 0.40	\$ 135.83	\$ 353.08
Soda Ash Light Density	\$ 0.35		\$ 2,100.00	\$ 0.65				\$ 4.1026	\$ 95.00	\$ 0.40	\$ 862.38	\$ 4,464.39
Sodium Permanganate 20%	\$ 1.20		\$ 9,576.00	\$ 1.35			\$ 0.38					
Hydrogen Peroxide 35%	\$ 0.35		\$ 175.00				\$ 1.15					
Hydrogen Peroxide 32%							\$ 0.55					
Corrosion Control (Current)					\$ 13.20		\$ 0.6515					
Corrosion Control (Aqua Pure 3655)	\$ 1.00		\$ 600.00									
DeChlor / Norweco Bio-Max 48lbs	\$ 154.00	ea.	\$ 2,464.00	\$ 136.80	ea.	\$ 232.97						

* Denotes current supplier

Surry 1% discount 10 days or net 30 days

Process Chemical Prices

Process Chemical	Qty.	Common Order		Current Price per Order	Lowest Price per Order	Orders in 2018	2018 Price Annualized	Current Price Annualized	Lowest Price Annualized
		Unit	Amount Unit						
Sodium Hypochlorite 12.5%	1		4500 gal	\$ 5,625.00	\$ 4,410.00	4		\$ 22,500.00	\$ 17,640.00
Sodium Hypochlorite 12.5% (2018)				\$ 7,582.50			\$ 30,330.00		
DelPac 2020 (Bulk)	1	20000 lbs		\$ 6,300.00	\$ 6,300.00	11	\$ 69,300.00	\$ 69,300.00	\$ 69,300.00
DelPac 2020 (Single Barrel)	1	550 lbs	55 gal	\$ 353.08	\$ 341.00	2		\$ 706.16	\$ 682.00
DelPac 2020 (Multiple Barrels)	16.58	550 lbs	55 gal	\$ 4,464.39	\$ 4,464.39	1	\$ 4,464.39	\$ 4,464.39	\$ 4,464.39
Hydrofluosilicic Acid 23%	12	550 lbs	55 gal	\$ 2,802.72	\$ 2,640.00	3	\$ 8,408.15	\$ 8,408.15	\$ 7,920.00
Soda Ash Light Density	3	2000 lbs		\$ 3,900.00	\$ 2,100.00	4.25	\$ 16,575.00	\$ 16,575.00	\$ 8,925.00
Sodium Permanganate 20%	15	532 lbs	55 gal	\$ 10,773.00	\$ 9,177.00	2	\$ 21,546.00	\$ 21,546.00	\$ 18,354.00
Hydrogen Peroxide 35%	1	500 lbs	55 gal				\$ -	\$ -	\$ -
Hydrogen Peroxide 32%	1	500	55 gal				\$ -	\$ -	\$ -
Corrosion Control (Current)	1		55 gal	\$ 726.00		3	\$ 2,178.00	\$ 2,178.00	\$ -
Corrosion Control (Aqua Pure 3655)	1	600 lbs	55 gal		\$ 600.00		\$ -	\$ -	\$ 1,800.00
DeChlor / Norweco Bio-Max 48lbs	16	48 lbs		\$ 2,168.97	\$ 2,168.97	2	\$ 4,337.94	\$ 4,337.94	\$ 4,337.94

Common Order				Actual Total	
				\$ 161,657.77	

Process Chemical	2018 Amount Ordered
Sodium Hypochlorite 12.5%	18,000 gal
DelPac 2020	220,000 lbs
DelPac 2020 Barrels	19,120 lbs
Hydrofluosilicic Acid 23%	19,800 lbs
Soda Ash Light Density	25,500 lbs
Sodium Permanganate 20%	15,960 lbs
Hydrogen Peroxide 35%	Rare 1/yr?
Corrosion Control (Current)	165 gal
DeChlor / Norweco Bio-Max 48lbs	32 pails

Computed: \$ 157,139.47 \$ 150,015.63 \$ 133,423.33

Est. Savings w/ Lowest

\$ 23,716.15 \$ 16,592.31

Allocated Capacity
Allocation %
Avg Daily Capacity
80% of Allocation

Wytheville
37.8%
1.512 MGD
1.210 MGD

NRRWA Plant Total
100.0%
4.0 MGD
3.2 MGD

Year 2019
Month
January
February
March
April
May
June
July
August
September
October
November
December

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