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SOUTH CENTRAL WASTEWATER AUTHORITY Board of Directors Meeting

DATE: July 22, 2021

TIME: 2:00 pm

LOCATION: **Appomattox River Water Authority**
Board Room, Administration Building
21300 Chesdin Road
South Chesterfield, VA 23803

AGENDA

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Board Meeting held on May 20, 2021 (Exhibit A, Pages 2 to 4)
3. Public Comment (Exhibit B, Page 5)
4. Executive Director's Report:
 - Nutrient Project Update (Exhibit C, Pages 6 to 30)
 - Status Report: Ongoing Projects/Operations (Exhibit D, Page 31 to 32)
 - Financials
5. Items from Counsel
6. Closed Session
7. Other items from Board Members/Staff Not on Agenda
8. Adjourn

EXHIBIT A

BOARD OF DIRECTORS MEETING
South Central Wastewater Authority
May 20, 2021, at 1:00 p.m.
Location: Appomattox River Water Authority
21300 Chesdin Road, Petersburg, VA 23803

MEMBERS PRESENT:

Doug Smith, Chairman (Colonial Heights)
Lionel Lyons, Vice-Chairman (Petersburg)
Kevin Massengill, (Dinwiddie)

ALTERNATES PRESENT:

Frank Haltom, Secretary/Treasurer (Alternate, Prince George) (remote)
George Hayes, (Alternate, Chesterfield)
Scott Morris, (Alternate, Chesterfield)

ABSENT:

Joseph Casey, (Chesterfield)
Percy Ashcraft, (Prince George)
Todd Flippin, (Alternate, Colonial Heights)

STAFF PRESENT:

Robert B. Wilson, Executive Director, (ARWA & SCWWA)
James C. Gordon, Asst. Executive Director (ARWA & SCWWA)
Arthur Anderson, (McGuire Woods)
Melissa Wilkins, Business Manager/FOIA
(ARWA & SCWWA)
Kathy Summerson, Administrative Assistant (SCWWA)

OTHERS PRESENT:

Ted Cole (Davenport)
Ben Wilson, (Davenport)
Andrew Barnes, (Petersburg) (remote)
Tangela Innis, (Petersburg) (remote)

The SCWWA meeting was called to order by Mr. Smith, Chairman, at 1:09 p.m.

1. Call to Order/Roll Call

The roll was called:	Doug Smith	Present
	Kevin Massengill	Present
	George Hayes	Present
	Frank Haltom	Present
	Lionel Lyons	Present

Mr. Smith stated Mr. Haltom would be joining the meeting by conference call. The policy adopted by the Authority does require that the Board vote to permit remote participation.

Upon a motion made by Mr. Lyons and seconded by Mr. Hayes the Board voted to approve Mr. Haltom to be present by conference call.

For: 5 Against: 0 Abstain: 0

2. Approval of Minutes: Minutes of the Regular Meeting of the Board on March 18, 2021

Upon a motion by Mr. Hayes and seconded by Mr. Lyons the following resolution was adopted:

RESOLVED, that the Minutes of the Regular Meeting of the Board on March 18, 2021, are hereby approved:

For: 5 Against: 0 Abstain: 0

3. Public Comment

There were no Public Comments.

4. FY2021/22 Operating Budget

Mr. Gordon reported on the FY2021/22 Operating Budget. He stated that the budget was presented to the Board at the January 21, 2021, meeting and a public hearing held at the March 18, 2021, meeting. He stated after the public hearing there was a discussion and additional questions were raised by the members. We changed the name for the “57000 – Equipment Replacement” to “Operating Capital Outlay” to be consistent with the ARWA budget. We left the \$185,000 in the Equipment Replacement for replacement of the 1982 crane truck. The expense to purchase vehicles and equipment is placed in the year it is to be purchased. The budget projections were updated. The budget contains a 3% across the board merit increase for staff. He stated that staff requests Board to approve the budget as presented.

Mr. Lyons stated he felt very comfortable moving forward with the recommendation as presented. Mr. Hayes stated he would like to thank the Executive Director and his staff for working with Chesterfield County. They spent many hours going over financial documents and they were very gracious in answering all the questions and very thorough. He also appreciates staff making consistency between the two Boards on naming some of the funds. They fully support the budget and understand there is going to

be ongoing discussions about the 3% merit increase. Mr. Massengill stated that Mr. Wilson, staff, and financial team, what they do should not go unnoticed, and he supports the budget. Mr. Smith thanked Mr. Wilson, Mr. Gordon, Ms. Wilkins, and staff and stated he supported the budget. Mr. Haltom stated staff did a great job and put in a lot of hard work putting the budget together. He further stated he supported the budget.

Mr. Smith stated Mr. Hayes referenced more discussion on the merit increase and asked him what his thoughts were. Mr. Hayes commented at the last meeting we had discussions on the timing of the increase and keeping the Board informed of this. They support the 3% across the board increase instead of pay for performance. Mr. Smith stated he wanted to clarify that the 3% merit increase would be effective July 1, 2021, and further discussions as the Board desires moving forward.

Upon a motion made by Mr. Lyons and seconded by Mr. Massengill the following resolution was adopted:

RESOLVED, that the Board approves the Resolution included in the Board package of the South Central Wastewater Authority approving the Budget for FY 2021/2022 and the payment schedule:

Vote:

Doug Smith	Aye
Kevin Massengill	Aye
George Hayes	Aye
Frank Haltom	Aye
Lionel Lyons	Aye

Absent During Vote: **None**

5. Executive Director's Report:

- Nutrient Project Update**

Mr. Gordon reported on the nutrient project update. Permission was received to access EDA property (old Roper Property) to complete the due diligence, which includes surveying road alignment, road bores and archaeological investigation. Survey crews were on Roper Property on April 6th and 8th. Dovetail performed archaeological inspections on April 13th and 14th. ECS began geotechnical work on April 15th. On April 21st Hazen received a permit from the Department of Historic Resources (DHR) in case burial shafts or human remains were encountered. On May 4th and 5th Dovetail performed a more extensive archaeological evaluation of the alternate access road through the EDA Property. This involved excavations by a backhoe under the supervision of professional archaeologists. Preliminary findings indicated no obstructions or burial shafts. A formal evaluation and report will be submitted to DHR. 30% designs were received on April 1st and staff reviewed and provided comments. We met with engineers on April 27th to address SCWWA comments and have first MOPO (Maintenance of Plant Operations) meeting. The magazine onsite is not eligible for the Virginia Landmark Register (VLR) and National Register of Historic Places (NRHP). That means we can reclaim that property for the upgrade. We gained preliminary approval from the transmission section of VEPCO to allow underground gravity lines to the chlorine contact tank to encroach into the existing overhead easement. We asked Mr. Crocker on May 12th about the status of our WQIF grant application and was informed that our grant agreement was currently under review with DEQ. They hope to have it to us by the end of May. It did maintain 95% funding of eligible nutrient project costs. We may need to schedule a special meeting in June depending on when we receive the draft prior to our July 22, 2021, meeting. Mr. Gordon stated we asked Mr. Crocker when funding applications had to be put in and he said it opens on June 7, 2021, through July 30, 2021, and that would be for the revolving loan fund that we had discussed. He further stated that as more information on the grant becomes available, we would be sharing it with Board members.

Mr. Gordon stated that on July 1, 2021, we are expecting a 60% submittal from engineers. We need to submit the road plans to the EDA and the City of Petersburg to acquire right of way to the new access road. We need to complete the WQIF 2021 Needs Assessment Survey for this project. We need to present the grant application to Board for review, discussion, and approval after discussion with respective boards and councils. We hope to have that draft by the end of May. We also need to secure financing for the project.

Mr. Smith asked everyone's thoughts on when the grant agreement comes in, if there was a need to have a meeting with the Board and go over any questions, and then take it back to their respective Boards and Councils. Mr. Wilson stated he thought the sequence would be to present it to this Board so they could have the opportunity to review and ask any questions. Once we get your answers to those questions, then we would be available to come back when you make the presentations to your various councils and Boards. He further stated we could do the heavy lifting and explain that so you could get the approval. Mr. Wilson stated in this case with the amount of money we are borrowing, it needs to go back to each governing board to get approval and it must be unanimous.

- Construction Award for Drain Pump Station Project**

Mr. Gordon reported on the construction award for the drain pump station project. This was not included in the upgrade so that is why it is a separate project for this budget year. The Authority received three bids which were opened on April 21, 2021. The lowest bid was from Enviroscope Inc. for \$127,600. He stated in the budget we had \$250,000, and funds are included in our current operating budget. Our consultant reviewed the low bid and recommended awarding this

project to Enviroscope Inc. Mr. Lyons asked what the plans were for the additional \$110,000 left over from the \$250,000. Mr. Gordon stated the \$140,000 was for installation and the remaining is for the Gorman Pump Station and the Shelter Works enclosure, which would be \$110,000 - \$120,000.

Upon a motion made by Mr. Lyons and seconded by Mr. Hayes the following resolution was adopted:

RESOLVED, that the Board awards the construction contract for the Headworks Drain Pump Station to Enviroscope Inc. in the amount of \$127,600 and authorizes the Executive Director to execute the necessary documents. The Board authorizes a contingency of 10%, an additional \$12,760, for a total construction cost of \$140,360. The Executive Director will be responsible for reporting back to the Board at project completion with a summary of total construction costs:

Vote:

Doug Smith	Aye
Kevin Massengill	Aye
George Hayes	Aye
Frank Haltom	Aye
Lionel Lyons	Aye

Absent During Vote: **None**

- **Status Report: Ongoing Projects/Operations**

Mr. Gordon reported on the Status Report of Ongoing Projects/Operations. He stated we were informed about a complaint of some of the leachate/septage hauling trucks parking on Pocahontas Island. On May 7, 2021, a notice was sent to our septage/leachate haulers informing them that idling, and parking was not allowed on the island. We worked with the City of Petersburg to have "NO PARKING" signs put up. SCWWA website has been updated to a new platform. Mr. Lyon stated that Mr. Andrew Barnes and Ms. Tangela Innis from City of Petersburg are here by conference call, and he would like to thank Staff for working with Mr. Barnes. He further stated that Mr. Barnes has been a jewel in helping Petersburg with their issues. Mr. Gordon stated that Mr. Barnes and the rest of the Staff of Petersburg were easy to work with.

- **Financials**

Ms. Wilkins reported on the Financials. She stated with the approval of the budget that these statements will be updated to reflect the new naming of some of our accounts so that the Board will have a clear picture of how the funds are being spent. Year-to-date through the end of April our septage/leachate revenue is right at \$780,000. All those funds get moved to our Capital Reserve Account, and year-to-date those funds are at \$9.3 million. Mr. Wilson stated that when we say Capital Reserve that is to offset the costs of the nutrient project.

6. Items from Counsel

There were no items from Counsel.

7. Closed Session

There was no Closed Session.

8. Other Items from Board Members/Staff Not on Agenda

There were no other items from Board Members/Staff not on Agenda.

9. Adjourn

Mr. Smith stated, if there is no other business, and asked for motion to adjourn.

Upon a motion by Mr. Massengill and seconded by Mr. Lyons the meeting was adjourned at 1:39 p.m.

MINUTES APPROVED BY:

Frank Haltom
Secretary/Treasurer



APPOMATTOX RIVER WATER AUTHORITY
21300 Chesdin Road
Petersburg, VA 23803



SOUTH CENTRAL WASTEWATER AUTHORITY
900 Magazine Road
Petersburg, VA 23803

GUIDELINES FOR PUBLIC COMMENT AT SCWWA/ARWA BOARD OF DIRECTORS MEETINGS

If you wish to address the SCWWA/ARWA Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Public Comment Period." Each person will be allowed to speak for up to three minutes.

When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During the Public Comment Period, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion presentations may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meeting, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman;
- Come forward and state your full name and address. If speaking for a group, state your organizational affiliation;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the Public Comment Period has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.



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EXHIBIT C

TO: South Central Wastewater Authority Board of Directors

FROM: Robert B. Wilson, Executive Director
James C. Gordon, Assistant Executive Director

DATE: July 22, 2021

SUBJECT: Nutrient Project Update

- Chris Pomeroy of AquaLaw will be present to present the draft grant agreement. Chris Pomeroy, Preston Bryant of McGuireWoods Consulting, and VAMWA were instrumental in supporting SCWWA in our team effort to obtain this grant.
- Ted Cole of Davenport will be available via Zoom to answer any financial questions. Solicitations for Clean Water Revolving Loan Funds (CWRLF) are due July 30th.

Since the May 2021 meeting, the following effort has taken place on the Nutrient Project:

- On June 17, 2021, the Petersburg Economic Development Authority (EDA) was presented with the proposed alignment and 30% design for the alternate access road through Roper. The EDA accepted the alignment and design as presented.
- The last monthly update meeting for the Nutrient Reduction Project was held on May 25th.
 - Hazen will provide the SCWWA with elevations at the new south reactor so Dominion Energy can evaluate raising the primary feed power lines.
 - SCWWA informed Hazen that our preference is to upgrade the SCADA to the latest version of IFIX and to include the trending package. Data analytics programs were also discussed.
 - South Aeration tank drain pumps, caustic storage, scum system for new final clarifiers 5 and 6, and architectural updates in admin were also discussed.
- On June 9th, the engineering team and SCWWA staff met to discuss critical decisions for the mixed liquor distribution and primary effluent flow split.
 - Hazen presented a new option that adds new distribution boxes for final clarifiers 5 and 6 and maintains the existing clarifier distribution boxes. Two separate alum feed systems will be designed to feed each of the distribution boxes.

- Hazen also proposed an alternative yard piping configuration from the new south reactor to the existing north reactor. The latest proposal utilizes the existing primary effluent line along Magazine Road. A new truck scale will be needed. SCWWA was agreeable with the new proposal.
- Pathways for lines from the north reactor to the final clarifiers 5 and 6 were also discussed. Additional potholes/borings are scheduled for July 14th to investigate these potential pathways.
- Survey work and inspections are being performed by the design engineers to evaluate the work required on the primary clarifiers. On June 18th, they inspected primary clarifier 3 and elevations were taken on the floor. Based on the elevations, the clarifier is level and may not require grout. The inspection of primary clarifier 1 is scheduled for July 26th.
- On June 25th, SCWWA and WW Associates staff visited Totopotomoy Wastewater Treatment Plant in Hanover to inspect the Gravity Belt Thickener (GBT) and Belt Filter Press (BFP). They have one of the systems we will be bidding for the Solids Conditioning Building.
- The representative with APG Neuros, one of the vendors for turbo blowers, has contacted us and will be visiting onsite to present their system on July 28th.
- On June 29th, we received the cultural and archeological report from Dovetail for the access road through the Roper Property. Based on their survey of the proposed road alignment, the property is not eligible for the Virginia Landmark Register (VLR) and National Register of Historic Places (NRHP). Dovetail has sent their report and recommendation to the Department of Historic Resources.
- Our design engineers, IT staff, and system integrators have met a couple of times to discuss the current status of the Authority systems and what our needs are for the upgrade. The last meeting was on June 29th.
- We received the Water Quality Improvement Fund Grant Agreement on June 23rd. A copy of the grant agreement was shared with the SCWWA membership on June 28th. A copy of the grant agreement is included as Attachment 1. Also included, as Attachment 2, is a resolution to authorize execution of the grant agreement. Staff has provided DEQ requested information related to payments made to date for the PER, VE, and engineering design work that will be reimbursable through the WQIF grant. To briefly summarize the grant agreement.
 - The agreement maintains our request for 95% of grant eligible cost with and total of approximately \$81.9 million.
 - The upgraded facility will have concentration limits of 4.0 mg/L for nitrogen and 0.3 mg/L for phosphorus.
 - There is a “Monetary Assessment for Breach”. This is the penalty if the plant does not meet the nitrogen and phosphorus concentration limits. There is a safety factor included and we should never see this item invoked.
- On June 25th, Mr. Wilson attended the Governor’s signing of HB2129 in Virginia Beach. This bill facilitates the grant agreement for the South Central Wastewater Authority.
- Mr. Wilson met with the new City Manager for Petersburg on July 9, 2021 to provide information related to the project and projected financial impacts to the City. Also, two members have requested his attendance at City Council/Board of Supervisor meetings to present the project and grant agreement. We would be happy to present the same for any other member if requested.
- Upcoming milestones:

- 60% plan due to SCWWA on August 2nd.
- The Board will need to authorize the chairman to sign the grant agreement to move forward.
- Upon approval by the Board, DEQ will post the grant agreement for no less 30 days and no more than 60 days.
- After the posting period, Mr. Paylor of DEQ will execute the grant agreement. At that point we can seek reimbursement for out-of-pocket expenses to date such as the PER, VE, and portions of the design.
- The solicitation period for the Clean Water Revolving Loan Fund period closes on July 30th. We have our engineering consultant assisting us with the application. We will request authorization to submit the application for the local share portion, approximately \$26 million, of the nutrient project. We will have Ted Cole, with Davenport, provide a recommendation for financing. Mr. Cole plans to attend the meeting via Zoom.

Board Action Requested:

Staff requests the Board approve the grant resolution (Attachment 2) authorizing the Chairman and the Executive Director to execute the final grant agreement. Staff also requests the Board authorize the executive director to submit an application for Clean Water Revolving Loan Funds in the amount of \$30,000,000 million for the local share portion of the project to VRA.

**VIRGINIA WATER QUALITY IMPROVEMENT FUND
POINT SOURCE GRANT AND
OPERATION AND MAINTENANCE AGREEMENT
Contract #440-S-20-03**

THIS AGREEMENT is made as of this ____ day of _____, 2021, by and between the Director of the Virginia Department of Environmental Quality in his official capacity, or his designee (the “Director”), and the South Central Wastewater Authority (the “Grantee”).

Pursuant to the Virginia Water Quality Improvement Act of 1997, Chapter 21.1, Title 10.1 of the Code of Virginia (1950), as amended (the “Act”), the General Assembly created the Virginia Water Quality Improvement Fund (the “Fund”). The Director, in coordination with the Director of the Department of Conservation and Recreation, is authorized by the Act to make Water Quality Improvement grants related to point source pollution control, in accordance with guidelines established pursuant to Section 10.1-2129 of the Code, and enter into agreements with grantees under the Act which shall, in accordance with Sections 10.1-2130 and 10.1-2131, provide for the payment of the total amount of the grant and require proper long-term operation, monitoring and maintenance of funded projects.

The Grantee has been approved by the Director to receive a Grant from the Fund subject to the terms and conditions herein to finance ninety-five percent (95%) of the cost of the Eligible Project, which consists of the design and installation of Nutrient Removal Technology as described herein. The Grantee will use the Grant to finance that portion of the Eligible Project Costs not being paid for from other sources as set forth in the Total Project Budget in Exhibit B to this Agreement. Such other sources may include, but are not limited to, the Virginia Water Facilities Revolving Fund, Chapter 22, Title 62.1 of the Code of Virginia (1950), as amended.

As required by the Act, this Agreement provides for payment of the Grant, design and construction of the Project, and proper long-term operation, monitoring, and maintenance of the Project. This Agreement is supplemental to the State Water Control Law, Chapter 3.1, Title 62.1 of the Code of Virginia (1950), as amended, and it does not limit in any way the other water quality restoration, protection and enhancement, or enforcement authority of the Director, the State Water Control Board (the “Board”) or the Department of Environmental Quality (the “Department”).

**ARTICLE I
DEFINITIONS**

1. The capitalized terms contained in this Agreement shall have the meanings set forth below unless the context requires otherwise and any capitalized terms not otherwise defined herein shall have the meaning assigned to such terms in the Act:

(a) “Agreement” means this Virginia Water Quality Improvement Fund Point Source Grant and Operation and Maintenance Agreement between the Director and the Grantee, together with any amendments or supplements hereto.

(b) “Authorized Representative” means any member, official or employee of the Grantee authorized by resolution, ordinance or other official act of the governing body of the Grantee to perform the act or sign the document in question.

(c) “Eligible Project” means the particular Nutrient Removal Technology described in Exhibit A to this Agreement to be designed and constructed by the Grantee with, among other monies, the Grant, with such changes thereto as may be approved in writing by the Director and the Grantee.

(d) “Eligible Project Costs” means costs of the individual items comprising the Eligible Project as permitted by the Act with such changes thereto as may be approved in writing by the Director and the Grantee.

(e) “Extraordinary Conditions” means unforeseeable or exceptional conditions resulting from causes beyond the reasonable control of the Grantee such as, but not limited to fires, strikes, acts of God, and acts of third parties that singly or in combination cause material breach of this Agreement.

(f) “Facility” means all plants, systems, unit processes, equipment or property related to the Project, and owned, operated, or maintained by the Grantee and used in connection with the treatment of wastewater.

(g) “Grant” means the particular grant described in Section 4.0 of this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

(h) “Monetary Assessment” means a contractual or stipulated penalty as described in Section 10.1-2130 of the Code.

(i) “Nutrient Removal Technology” means state-of-the-art nutrient removal technology, biological nutrient removal technology, or other nutrient removal technology, as further described in Section 10.1-2117 of the Code.

(j) “Preliminary Engineering Proposal” means the engineering report and preliminary plans for the Project as described in 9 VAC 25-790-110, as modified by the final engineering design approved by the Department.

(k) “Total Eligible Project Budget” means the sum of the Eligible Project Costs as set forth in Exhibit B to this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

(l) “Total Project Budget” means the sum of the Eligible Project Costs and any ineligible costs that are solely the responsibility of the Grantee, as set forth in Exhibit B to this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

(m) “Project Engineer” means the Grantee’s engineer who must be a licensed professional engineer registered to do business in Virginia and designated by the Grantee as the Grantee’s engineer for the Project in a written notice to the Department.

(n) “Project Schedule” means the schedule for the Project as set forth in Exhibit C to this Agreement, with such changes thereto as may be approved in writing by the Director and the Grantee.

ARTICLE II

SCOPE OF PROJECT

2. The Grantee will cause the Project to be designed, constructed and placed in operation as described in Exhibit A to this Agreement to meet effluent concentration limitations of 4.0 mg/l for total nitrogen, and 0.30 mg/l for total phosphorus, both on an annual average basis.

ARTICLE III

SCHEDULE

3. The Grantee will cause the Eligible Project to be designed, constructed and placed in operation in accordance with the Project Schedule in Exhibit C to this Agreement.

ARTICLE IV

COMPENSATION

4.0. Grant Amount. The total grant award from the Fund under this Agreement is \$81,958,133 and represents the Commonwealth's ninety-five percent (95%) share of the Total Eligible Project Budget. Any material changes made to the Eligible Project after execution of this Agreement, which alters the Total Eligible Project Budget, will be submitted to the Department for review of grant eligibility. The amount of the grant award set forth herein may be modified from time to time by agreement of the parties to reflect changes to the Eligible Project or the Total Eligible Project Budget.

4.1. Payment of Grant. Payment of the Grant is subject to the availability of monies in the Fund allocated to point source pollution control and Section 4.4 herein. Disbursement of the Grant will be in accordance with the payment provisions set forth in Section 4.2 herein and the eligibility determinations made in the Total Project Budget (Exhibit B).

4.2. Disbursement of Grant Funds. The Department will disburse the Grant to the Grantee not more frequently than once each calendar month upon receipt by the Department of the following:

(a) A requisition for approval by the Department, signed by the Authorized Representative and containing all receipts, vouchers, statements, invoices or other evidence that costs in the Total Project Budget, including the applicable local share for the portion of the project covered by such requisition, have been incurred or expended and all other information called for by, and otherwise being in the form of, Exhibit D to this Agreement.

(b) If any requisition includes an item for payment for labor or to contractors, builders or material men, a certificate, signed by the Project Engineer, stating that such work was actually performed or such materials, supplies or equipment were actually furnished or installed in or about the construction of the Eligible Project.

Upon receipt of each such requisition and accompanying certificate(s) and schedule(s), the Director shall request the Comptroller to issue a warrant directing the State Treasurer to disburse the Grant to the Grantee in accordance with such requisition to the extent approved by the Department.

Except as may otherwise be approved by the Department, disbursements shall be held at ninety-five percent (95%) of the total grant amount to ensure satisfactory completion of the Eligible Project. Upon receipt from the Grantee of the certificate specified in Section 4.5 and a final requisition detailing all retainage to which the Grantee is then entitled, the Director, subject to the provisions of this section and Section 4.3 herein, shall request the Comptroller to issue a warrant directing the State Treasurer to disburse to the Grantee the final payment from the Grant.

4.3 Application of Grant Funds. The Grantee agrees to apply the Grant solely and exclusively to the reimbursement of Eligible Project Costs.

4.4. Availability of Funds. The Director and Grantee recognize that the availability of monies in the Fund allocated to point source pollution control is subject to appropriation by the General Assembly and allocations made by the Secretary of Natural Resources, and that at times there may not be sufficient monies in the Fund to permit prompt disbursement of grant funds due and owing the Grantee pursuant to this Agreement. To minimize the potential for such disruption in disbursements of grant funds and in satisfaction of its obligations under the Act, the Department covenants and agrees to (1) manage the allocation of grants from the Fund to ensure full funding of executed grant agreements, (2) forecast the estimated disbursements from the Fund in satisfaction of approved grants and make this forecast publicly available each year for use in the Commonwealth's budgetary process, and (3) promptly disburse to the Grantee any grant funds due and owing the Grantee pursuant to this Agreement when sufficient monies are available in the Fund to make such disbursements. The Department may determine that monies are not sufficient to promptly disburse grant funds when there are competing grant requests. To assist the Department in forecasting estimated disbursements, prior to September 30 of each year the Grantee will provide the Department with a written estimate of its projected expenditures on the Project during the next fiscal year using the same line item cost categories in the Project Budget.

4.5. Agreement to Complete Project. The Grantee agrees to cause the Project to be designed and constructed, as described in Exhibit A to this Agreement, and in accordance with (i) the schedule in Exhibit C to this Agreement and (ii) plans and specifications prepared by the Project Engineer and approved by the Department.

4.6 Notice of Substantial Completion. When the Project has been completed, the Grantee shall promptly deliver to the Department a certificate signed by the Authorized Representative and by the Project Engineer stating (i) that the Project has been completed substantially in accordance with the approved plans and specifications and addenda thereto, and in substantial compliance with all material applicable laws, ordinances, rules, and regulations; (ii) the date of such completion; (iii) that all certificates of occupancy and operation necessary for start-up for the Project have been issued or obtained; and (iv) the amount, if any, to be released for payment of the final Project Costs.

ARTICLE V **PERFORMANCE**

5.0 The Grantee's Facility shall meet a total nitrogen effluent concentration limitation of 4.0 mg/l, and a total phosphorus effluent concentration limitation of 0.30 mg/l, both on an annual average basis, except as provided in paragraph 5.1 and Article VIII of this Agreement.

5.1 If, pursuant to Section 10.1-1187.6 of the Code, the State Water Control Board approves an alternative compliance method to technology-based concentration limitations in Virginia Pollutant Discharge Elimination System permits, the concentration limitations in Section 5.0 above shall be suspended subject to the terms of such approval. The terms of approval shall include requirements for operation of the installed Nutrient Removal Technology at the treatment levels for which it was designed.

ARTICLE VI **OPERATION AND MAINTENANCE**

6.0 No later than ninety (90) days after issuance of a Certificate to Operate for the Project, the Grantee shall submit to the Department, for review and approval, an operation and maintenance manual for the Project. As required by the Grantee's VPDES permit, the Facility shall be operated and maintained in a manner consistent with the operation and maintenance manual as approved by the Department.

ARTICLE VII

MONITORING AND REPORTING

7.0. **Monitoring.** The Grantee shall monitor compliance with the numerical concentrations in Article V of this Agreement. Monitoring will be conducted at the final effluent from the facility and immediately prior to discharge. Sampling frequency and type shall be in accordance with VPDES permit requirements. In the absence of total nitrogen or total phosphorus VPDES permit monitoring requirements, monitoring shall consist of a sample type and collection frequency as specified in the Chesapeake Bay General Watershed Permit Regulation (9 VAC 25-820-70.Part 1.E.). Each sample will be analyzed for total nitrogen and total phosphorus using EPA-approved test methods and reported to the Department.

7.1. **Reporting.** Beginning with the Project's first full calendar year of operation and each year thereafter, the Grantee will calculate the annual average concentration for total nitrogen and total phosphorus for the calendar year just ended by dividing the sum of the monthly average concentrations by twelve, and submit the results to the Department using the form attached as Exhibit E to this Agreement on or before February 1 of each year. Data excluded from the average based on the occurrence of extraordinary conditions will be identified in the report.

ARTICLE VIII

MATERIAL BREACH

8.0. **Material Breach.** Any failure or omission by the Grantee to perform its obligations under this Agreement, unless excused by the Department, is a material breach.

8.1. **Notice of Material Breach.** If at any time the Grantee determines that it is unable to perform its obligations under this Agreement, the Grantee shall promptly provide written notification to the Department. This notification shall include a statement of the reasons it is unable to perform, any actions to be taken to secure future performance and an estimate of the time necessary to do so.

8.2. **Monetary Assessments for Breach.** In no event shall total Monetary Assessments pursuant to this Agreement exceed (i) \$6,573,042.00 annually or (ii) \$131,460,840.00 during the life of this Agreement. Monetary Assessments will be paid into the State Treasury and credited to the Fund. The Director's right to collect Monetary Assessments does not affect in any way the Director's right to secure specific performance of this Agreement using such other legal remedies as may otherwise be available. Within 90 days of receipt of written demand from the Director, the Grantee shall pay the following Monetary Assessments for the corresponding material breaches of this Agreement unless the Grantee asserts a defense pursuant to the requirements of Section 8.3 herein.

(a) Beginning with the Project's first full calendar year of operation following issuance of a Certificate to Operate for the Project, for exceedance of one or both of the numerical concentration limitations applicable under Article V of this Agreement, except where the exceedance is no greater than 0.8 mg/L for total nitrogen or no more than 10%, whichever is greater, or no greater than 0.1 mg/L for total phosphorus or no more than 10%, whichever is greater, an assessment calculated as follows:

(i) For noncompliance with the total nitrogen effluent limitation in Article V, an assessment calculated using the formula in Exhibit F to this Agreement for each one-tenth of a milligram per liter of total nitrogen in excess of the limitation in Article V.

(ii) For noncompliance with the total phosphorus effluent limitation in Article V, an assessment calculated using the formula in Exhibit F to this Agreement for each one-tenth of a milligram per liter of total phosphorus in excess of the limitation in Article V.

(b) For noncompliance with any deadline in Exhibit C to this Agreement, Article VII of this Agreement, or the failure to submit the operations and maintenance manual in accordance with Article VI of this Agreement, an assessment in the amount of \$500 per day for the first 10 days of noncompliance, and \$1,000 for each day of noncompliance thereafter. Noncompliance with interim deadlines shall be excused where the Grantee complies with the final deadline in Exhibit C to this Agreement.

(c) For noncompliance with the obligation to operate and maintain the Project in a manner consistent with the manual pursuant to Article VI of this Agreement, an assessment in the amount of \$1,000 for each day of noncompliance.

8.3 Extraordinary Conditions.

(a) The Grantee may assert and it shall be a defense to any action by the Director to collect a Monetary Assessment or otherwise secure performance of this Agreement that the alleged non-performance was due to Extraordinary Conditions, provided that the Grantee:

(1) takes reasonable measures to effect a cure or to minimize any non-performance with the Agreement, and

(2) provides written notification to the Department of the occurrence of Extraordinary Conditions, together with an explanation of the events or circumstances contributing to such Extraordinary Conditions, no later than 5 days after the discovery of the Extraordinary Conditions and the resulting impacts on performance.

(b) If the Department disagrees that the events or circumstances described by the Grantee constitute Extraordinary Conditions, the Department must provide the Grantee with a written objection within sixty (60) days of Grantee's notice under paragraph 8.3(a)(2), together with an explanation of the basis for its objection.

8.4 Resolution and Remedy. If no resolution is reached by the parties, the Director or Department may immediately pursue any remedy available at law or equity. In any such action, the Grantee shall have the burden of proving that the alleged noncompliance was due to Extraordinary Conditions. In addition to any other remedy that may be available to the Director or the Department, the Director or Department may bring an action in the Circuit Court of the City of Richmond to enforce this Agreement by injunction or mandamus or stipulated penalties or to recover part or all of the grant funds. No such remedy of the Director or Department shall be deemed to be exclusive or to stop any other such remedy or the bringing of an action to enforce this Agreement. The Grantee agrees to venue to any such action in the Circuit Court of the City of Richmond, either north or south of the James River in the option of the Director. The Grantee further agrees that, in light of the public purpose of nutrient removal, any failure of the Grantee to perform its duties under this Agreement and any failure of the Project to meet the requirements of this Agreement or the requirements of any permit that may be issued by the Board regarding the Project constitutes irreparable harm to the Commonwealth for which the Director or Department lacks an adequate remedy at law.

ARTICLE IX **GENERAL PROVISIONS**

9.0. Effect of the Agreement on Virginia Pollutant Discharge Elimination System (VPDES) Permit. This Agreement shall not be deemed to relieve the Grantee of its obligations to comply with the terms of its VPDES permit issued by the Board.

9.1. Disclaimer. Nothing in this Agreement shall be construed as authority for either party to make commitments which will bind the other party beyond the covenants contained herein.

9.2. Non-Waiver. No waiver by the Director of any one or more defaults by the Grantee in the performance of any provision of this Agreement shall operate or be construed as a waiver of any future default or defaults of whatever character.

9.3. Integration and Modification. This Agreement constitutes the entire Agreement between the Grantee and the Director. No alteration, amendment or modification of the provisions of this Agreement shall be effective unless reduced to writing, signed by both the parties and attached hereto. The Department and the Grantee shall confer within six months after each reissuance of the Grantee's VPDES permit for the purpose of determining whether this Agreement should be modified or terminated. This Agreement may be modified by agreement of the parties for any purpose, provided that any significant modification to this Agreement must be preceded by public notice of such modification.

9.4. Collateral Agreements. Where there exists any inconsistency between this Agreement and other provisions of collateral contractual agreements which are made a part of this Agreement by reference, the provisions of this Agreement shall control.

9.5. Non-Discrimination. In the performance of this Agreement, the Grantee warrants that it will not discriminate against any employee, or other person, on account of race, color, sex, religious creed, ancestry, age, national origin or other non-job related factors. The Grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

9.6. Conflict of Interest. The Grantee warrants that it has fully complied with the Virginia Conflict of Interest Act as it may apply to this Agreement.

9.7. Applicable Laws. This Agreement shall be governed in all respects whether as to validity, construction, capacity, performance or otherwise, by the laws of the Commonwealth of Virginia. The Grantee further agrees to comply with all laws and regulations applicable to the Grantee's performance of its obligations pursuant to this Agreement.

9.8. Records Availability. The Grantee agrees to maintain complete and accurate books and records of the Project Costs, and further, to retain all books, records, and other documents relative to this Agreement for three (3) years after final payment. The Department, its authorized agents, and/or State auditors will have full access to and the right to examine any of said materials during said period. Additionally, the Department and/or its representatives will have the right to access work sites during normal business hours, after reasonable notice to the Grantee, for the purpose of ensuring that the provisions of this Agreement are properly carried out.

9.9. Severability. Each paragraph and provision of this Agreement is severable from the entire Agreement; and if any provision is declared invalid, the remaining provisions shall nevertheless remain in effect.

9.10. Notices. All notices given hereunder shall be in writing and shall be sent by United States certified mail, return receipt requested, postage prepaid, and shall be deemed to have been received at the earliest of: (a) the date of actual receipt of such notice by the addressee, (b) the date of the actual delivery of the notice to the address of the addressee set forth below, or (c) five (5) days after the sender deposits it in the mail properly addressed. All notices required or permitted to be served upon either party hereunder shall be directed to:

Department: Virginia Department of Environmental Quality
CWFAP
P.O. Box 1105
Richmond, VA 23218
Attn: WQIF Program Manager

Grantee: South Central Wastewater Authority
900 Magazine Road
Petersburg, VA 23803
Attn: Robert Wilson, PE

9.11. Successors and Assigns Bound. This Agreement shall extend to and be binding upon the parties hereto, and their respective legal representatives, successors and assigns.

9.12. Exhibits. All exhibits to this Agreement are incorporated herein by reference.

9.13. Termination. This Agreement shall terminate 20 years after the Agreement is executed by both parties or by an earlier date by agreement of the parties; provided, however, that except for termination for cause due to Material Breach, the Director's obligation under Section 4.1 herein to pay the Grant amount shall survive termination if such amount has not been paid in full as of the termination date.

ARTICLE X **COUNTERPARTS**

10. This Agreement may be executed in any number of Counterparts, each of which shall be an original and all of which together shall constitute but one and the same instrument.

ARTICLE XI **NUTRIENT CREDITS TO BE MADE AVAILABLE FOR EXCHANGE**

11. To aid in implementing the Nutrient Credit Exchange Program, the Grantee shall make all Point Source Nitrogen and Phosphorus Credits generated in a calendar year available for nutrient allocation compliance. "Point Source Nitrogen Credit" and "Point Source Phosphorus Credit" shall have the meaning as defined in Virginia Code §62.1-44.19:13. The amount of Credits and facilities authorized to generate Credits shall be governed by the Watershed General Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading (9 VAC 25-820). The Department shall control Credits not otherwise used by the Grantee for waste load allocations or compliance purposes and will make such Credits reasonably available to other dischargers for nutrient allocation compliance through the Water Quality Improvement Fund. For purposes of this Agreement, "used by the Grantee" shall include any use whereby the Credits are applied to any compliance obligation of the Grantee, included within an individual compliance plan or basin-level compliance plan of the Virginia Nutrient Credit Exchange Association, or traded to and used by the owner or operator of another facility for nutrient allocation compliance.

WITNESS the following signatures, all duly authorized.

DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

By: _____

Date: _____

GRANTEE'S AUTHORIZED REPRESENTATIVE

By: _____

Date: _____

EXHIBIT A
PROJECT DESCRIPTION

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

The South Central Wastewater Authority proposes to upgrade their existing Wastewater Treatment Plant to include Enhanced Nutrient Removal (ENR) technology. This undertaking includes improvements to existing aeration basins, adding additional aeration basin volume, post-aeration treatment, additional clarification, tertiary filtration and supplemental carbon facilities, and include other appurtenant pumping and piping related to these structures and facilities.

EXHIBIT B
TOTAL PROJECT BUDGET

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

The following budget reflects the “as-bid” costs associated with eligible project components.

Project Component	Total Cost	Percent Eligible (%)	Eligible Project Cost
Headworks	\$5,300,000	0%	\$0
Enhanced Nutrient Removal	\$35,100,000	96%	\$33,846,900
NRCY Pumps & Piping	\$2,672,873	100%	\$2,672,873
Anaerobic Zone Vertical Mixers (6 Mixers)	\$585,000	100%	\$585,000
Secondary Clarifier P Removal Equipment	\$626,667	100%	\$626,667
Two New Secondary Clarifiers	\$5,455,102	50%	\$2,727,551
RAS/WAS Pump Station	\$3,100,000	50%	\$1,550,000
Alum Feed System	\$200,000	100%	\$200,000
Tertiary Filters	\$10,900,000	100%	\$10,900,000
Intermediate Pump Station	\$3,800,000	100%	\$3,800,000
Carbon Feed Facility	\$1,200,000	100%	\$1,200,000
Disinfection System	\$300,000	0%	\$0
Post Aeration	\$700,000	100%	\$700,000
Solids Handling	\$8,300,000	40%	\$3,320,000
NPW System	\$900,000	100%	\$900,000
Supplemental Alkalinity Feed System	\$700,000	100%	\$700,000
Construction Total	\$79,839,642	79.82%	\$63,728,991
A/E Basic Fees	\$7,200,000	79.82%	\$5,747,129
Other A/E Fees	\$200,000	79.82%	\$159,642
Construction Inspection Fees	\$1,800,000	79.82%	\$1,436,782
Secondary Clarifier Modifications	\$11,544,898	79.82%	\$9,215,281
Ancillary Buildings	\$1,600,000	79.82%	\$1,277,140
Standby Generators	\$1,400,000	79.82%	\$1,117,497
Contingency	\$9,000,000	79.82%	\$7,183,911
Total Project Cost	\$112,584,540	79.82%	\$89,866,374
Grant Percentage			95%
Proration Based on “Reasonable and Necessary” Flow			96%
Grant Amount			\$81,958,133

EXHIBIT C
PROJECT SCHEDULE

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

The Grantee has proposed the following schedule of key activities/milestones as a planning tool which may be subject to change. In particular, the Grantee acknowledges that the appropriate approval (Certificate to Construct) must be issued by the Department prior to proceeding with construction. Unless authorized by a grant modification, it is the responsibility of the Grantee to adhere to the anticipated schedule for the project as follows:

Activity	Date/Duration
a. Construction	December 2022
b. Certificate to Operate	December 2025

EXHIBIT D
REQUISITION FOR REIMBURSEMENT
(To be on Grantee's Letterhead)

Department of Environmental Quality
Clean Water Financing and Assistance Program
P.O. Box 1105
Richmond, VA 23218
Attn.: WQIF Program Manager

RE: **Virginia Water Quality Improvement Fund Grant**
 South Central Wastewater Authority WQIF Contract #440-S-20-03

Dear Program Manager:

 This requisition, Number ____, is submitted in connection with the referenced Grant Agreement between the Director of the Virginia Department of Environmental Quality and the South Central Wastewater Authority (The Authority). The effective date of the grant agreement is [insert date of grant agreement].

 Unless otherwise defined in this requisition, all capitalized terms used herein shall have the meaning set forth in Article I of the Grant Agreement. The undersigned Authorized Representative of the Grantee hereby requests disbursement of grant proceeds under the Grant Agreement in the amount of \$_____ for the purposes of payment of the Eligible Project Costs as set forth on Schedule I attached hereto.

 Copies of invoices relating to the items for which payment is requested are attached.

 The undersigned certifies that the amounts requested by this requisition will be applied solely and exclusively to the reimbursement of the Grantee for the payment of Eligible Project Costs.

 This requisition includes (if applicable) an accompanying Certificate of the Project Engineer as to the performance of the work.

Sincerely,

(Authorized Representative of the Grantee)

Attachments

SCHEDULE 1
VIRGINIA WATER QUALITY IMPROVEMENT FUND
FORM TO ACCOMPANY REQUEST FOR REIMBURSEMENT

REQUISITION # _____

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

CERTIFYING SIGNATURE: _____

TITLE: _____

Cost Category	Total Project Budget	Eligible Project Cost*	91.2% WQIF Grant Share (95% x 96%)	Total Expenditures This Period	Previous Grant Disbursements	Grant Disbursement This Period	Grant Balance
Construction	\$ 94,384,540	79.82%	91.2%	\$0.00	\$0.00	\$0.00	\$68,709,085
		\$75,338,909	\$68,709,085				
Construction Contingency	\$9,000,000	79.82%	91.2%	\$0.00	\$0.00	\$0.00	\$6,551,727
		\$7,183,911	\$6,551,727				
Engineering Services	\$7,400,000	79.82%	91.2%	\$0.00	\$0.00	\$0.00	\$5,386,976
		\$5,906,772	\$5,386,976				
Construction Management/Inspection	\$1,800,000	79.82%	91.2%	\$0.00	\$0.00	\$0.00	\$1,310,345
		\$1,436,782	\$1,310,345				
TOTALS:	\$112,584,540	\$89,866,374	\$81,958,133	\$0.00	\$0.00	\$0.00	\$81,958,133

*Eligible project cost percentage =79.8212384

Total Grant Amount: \$81,958,133
Previous Grant Disbursements: \$0.00
This Grant Request: \$0.00
Total Grant Requested to Date: \$0.00
Grant Proceeds Remaining: \$81,958,133

CERTIFICATE OF THE PROJECT ENGINEER
FORM TO ACCOMPANY REQUEST FOR REIMBURSEMENT

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

This Certificate is submitted in connection with Requisition Number _____, dated _____, 20__, submitted by the South Central Wastewater Authority (the "Grantee") to the Virginia Department of Environmental Quality. Capitalized terms used herein shall have the same meanings set forth in Article I of the Grant Agreement referred to in the Requisition.

The undersigned Project Engineer for _____ hereby certifies that insofar as the amounts covered by this Requisition include payments for labor or to contractors, builders or material men, such work was actually performed or such materials, supplies, or equipment were actually furnished to or installed in the Project.

(Project Engineer)

(Date)

EXHIBIT E
REPORTING OF ANALYTICAL RESULTS

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

Year: _____

MONTH	PARAMETER	CONCENTRATION (monthly average)	UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
January	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
February	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
March	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
April	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
May	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
June	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
July	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
August	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
September	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
October	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
November	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
December	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		
Annual Average	Total Nitrogen		mg/l		
	Total Phosphorus		mg/l		

EXHIBIT E
REPORTING OF ANALYTICAL RESULTS
(continued)

Grantee: South Central Wastewater Authority
Grant: #440-S-20-03

Data Excluded Due to the Occurrence of Extraordinary Conditions: (if applicable; attach explanation)

Date(s): _____

Operator Responsible for Samples: _____ Date: _____

Telephone: _____ Certificate Number: _____

EXHIBIT F

FORMULA FOR CALCULATING MONETARY ASSESSMENT FOR EXCEEDANCE OF NUMERICAL NITROGEN CONCENTRATIONS

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

Section 2: Nitrogen Exceedances

$$CN = (TNe/TNr) \times AnPay \times PerGrant$$

where:

CN	=	Assessment for Nitrogen Exceedance.
TNe	=	Exceedance in tenths of a milligram per liter.
TNr	=	Expected nitrogen removal (difference between “pre-nutrient removal” annual average concentration and 4.0 mg/l limitation) in tenths of a milligram per liter.
AnPay	=	Annual Payment on grant; assumes principal payments amortized over 20 years and an interest rate of 5 percent. Using these assumed values leads to a “cost recovery factor” of 0.0802. The “cost recovery factor” times the grant amount yields the Annual Payment amount.
PerGrant	=	Percentage of grant received by year of exceedance.

Values used for Grant #440-S-20-03:

Pre-Nutrient Removal TN Concentration	= 35.0 mg/l
Effluent TN Concentration Limitation	= 4.0 mg/l
Total Grant Amount for TN Removal	= \$45,095,091
Useful Service Life	= 20 years
Interest Rate	= 5 percent

Calculated (assumes grant paid 100%):

Expected Removal (TNr)	= 31.0 mg/l
AnPay	= \$3,616,626
CN	= \$11,666 (for each 0.1 mg/l TN exceedance)

EXHIBIT F

FORMULA FOR CALCULATING MONETARY ASSESSMENT FOR EXCEEDANCE OF NUMERICAL PHOSPHORUS CONCENTRATIONS

Grantee: South Central Wastewater Authority

Grant: #440-S-20-03

Section 2: Phosphorus Exceedances

$$CP = (TPe/TPr) \times AnPay \times PerGrant$$

where:

CP	=	Assessment for Phosphorus Exceedance.
TPe	=	Exceedance in tenths of a milligram per liter.
TPr	=	Expected phosphorus removal (difference between “pre-nutrient removal” annual average concentration and 0.30 mg/l limitation) in tenths of a milligram per liter.
AnPay	=	Annual Payment on grant; assumes principal payments amortized over 20 years and an interest rate of 5 percent. Using these assumed values leads to a “cost recovery factor” of 0.0802. The “cost recovery factor” times the grant amount yields the Annual Payment amount.
PerGrant	=	Percentage of grant received by year of exceedance.

Values used for Grant #440-S-20-03:

Pre-Nutrient Removal TP Concentration	= 5.5 mg/l
Effluent TP Concentration Limitation	= 0.3 mg/l
Total Grant Amount for TP Removal	= \$36,863,042
Useful Service Life	= 20 years
Interest Rate	= 5 percent

Calculated (assumes grant paid 100%):

Expected Removal (TPr)	= 5.2 mg/l
AnPay	= \$2,956,416
CP	= \$56,854 (for each 0.1 mg/l TP exceedance)

ATTACHMENT 2

CERTIFICATE OF SECRETARY-TREASURER

The undersigned Secretary-Treasurer of the South Central Wastewater Authority (the “Authority”) hereby certifies that:

1. A regular meeting of the Board of the Authority was duly called and held on July 22, 2021 (the “Meeting”), at which the following members were present and absent:

PRESENT:

ABSENT:

2. A resolution (the “Resolution”) of the Authority entitled “RESOLUTION OF THE SOUTH CENTRAL WASTEWATER AUTHORITY APPROVING THE VIRGINIA WATER QUALITY IMPROVEMENT FUND POINT SOURCE GRANT AND OPERATION AND MAINTENANCE AGREEMENT TO PROVIDE FUNDING FOR THE NUTRIENT REMOVAL TECHNOLOGY UPGRADE PROJECT,” was duly adopted at the Meeting by the recorded affirmative vote of at least a majority of all of the members of the Board of the Authority on the motion of _____, which was seconded by _____, the ayes and nays being recorded in the minutes of the meeting as shown below:

MEMBER

VOTE

3. Attached is a true and correct copy of the Resolution.

WITNESS my signature and the seal of the South Central Wastewater Authority this ____ day of July 2021.

Frank Haltom, Secretary-Treasurer
South Central Wastewater Authority

[SEAL]

**RESOLUTION OF THE SOUTH CENTRAL WASTEWATER AUTHORITY
APPROVING THE VIRGINIA WATER QUALITY IMPROVEMENT FUND POINT
SOURCE GRANT AND OPERATION AND MAINTENANCE AGREEMENT TO
PROVIDE FUNDING FOR THE NUTRIENT REMOVAL TECHNOLOGY UPGRADE
PROJECT**

A. The South Central Wastewater Authority (the “Authority”) is currently in the process of designing upgrades to and additional facilities for the Authority’s wastewater treatment plant as part of its Nutrient Removal Technology Upgrade Project (the “Project”) and considering various options to finance the Project.

B. Pursuant to the Virginia Water Quality Improvement Act of 1997, Chapter 21.1, Title 10.1 of the Code of Virginia (1950), as amended (the “WQIF Act”), the General Assembly created the Virginia Water Quality Improvement Fund (the “Fund”). The Director of the Virginia Department of Environmental Quality (the “Director”), in coordination with the Director of the Virginia Department of Conservation and Recreation, is authorized by the WQIF Act to make Water Quality Improvement grants related to point source pollution control, in accordance with guidelines established pursuant to Section 10.1-2129 of the WQIF Act, and enter into agreements with grantees under the Act which shall, in accordance with Sections 10.1-2130 and 10.1-2131, provide for the payment of the total amount of the grant and require proper long-term operation, monitoring and maintenance of funded projects.

C. The Authority has been approved by the Director to receive a grant (the “Grant”) from the Fund subject to the terms and conditions of the Point Source Grant and Operation and Maintenance Agreement (the “Agreement”) to finance ninety-five percent (95%) of the costs of the portion of the design and installation of the Project eligible for funding under the WQIF Act (the “Eligible Project Costs”). The Authority intends to use the Grant to finance that portion of the Eligible Project Costs not being paid for from other sources.

D. The Agreement, the most recent draft of which has been presented to the Board of the Authority (the “Board”) at this meeting, provides for payment of the Grant and the design and construction of the Project, and also imposes certain requirements for the long-term operation, monitoring, and maintenance of the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF THE SOUTH CENTRAL WASTEWATER AUTHORITY THAT:

1. **Approval of Grant and Agreement.** The Board hereby finds that the acceptance of the Grant and the approval of the Agreement for the purposes described in this Resolution will promote the health, safety, welfare, morals and prosperity of the residents served by the Authority and will promote the governmental purposes for which the Authority was formed. The Board notes that any bonds or other debt that the Authority would issue or incur to pay the portion of the costs of the Project that will not be paid from the Grant requires the approval of all five of the Authority’s incorporating subdivisions, Chesterfield County, the City of Colonial Heights, Dinwiddie County, the City of Petersburg, and Prince George County, pursuant to the Service Agreement dated as of July 2, 1996, between the Authority and the incorporating subdivisions, as amended.

2. Execution and Delivery of Agreement. The draft Agreement presented to this meeting is approved. The Chairman and the Executive Director of the Authority, either of whom may act, are authorized to execute and deliver the final Agreement in substantially the form of the draft presented to this meeting, with such completions, deletions, insertions and changes not inconsistent with this Resolution as may be approved by the Chairman or the Executive Director, whose approval shall be evidenced conclusively by the execution and delivery of the final Agreement on the Authority's behalf.

3. Further Actions. The Chairman and the Executive Director and such officers and agents of the Authority as may be designated by the Chairman or the Executive Director are authorized and directed to take such further actions as may be necessary or appropriate regarding the Grant or the Agreement, including the execution and delivery on behalf of the Authority of such instruments, documents or certificates as the Chairman or the Executive Director shall deem necessary or appropriate to carry out the transactions contemplated by this Resolution.

4. Effective Date. This Resolution shall take effect immediately.



900 Magazine Rd.
Petersburg, VA 23803
Office: (804) 861-0111
Fax: (804) 861-3254

EXHIBIT D

TO: South Central Wastewater Authority Board of Directors

FROM: Robert B. Wilson, P.E., Executive Director
James C. Gordon, Assistant Executive Director

DATE: July 22, 2021

SUBJECT: Ongoing Projects\Operations

Operating Status Report

This report hits the highlights and does not cover the day-to-day maintenance or preventive maintenance summaries.

➤ General

- The next scheduled Board of Directors Meeting is Thursday, September 23, 2021 at the Appomattox River Water Authority at 2:00 pm.
- Additional safety lighting and cameras have been installed and we are waiting on them to be tied into our system.
- Bids for the biosolids disposal contract were opened on July 15th. Staff is evaluating the proposals and will issue a 1-year contract with an option for 2, 1-year renewals.
- On July 7th, Prince George contacted the Authority to inform us of an oil release from an industry into the sewer system. Fortunately, they were able to contain and remove the oil before it reached the treatment plant. We would like to thank Mr. Haltom for his communication during this event.
- On average, the SCWWA received 3 trucks of leachate per day for May 2021 and June 2021. Revenues for May were \$36,467 and for June were \$38,535. Septage receiving billed \$15,643 in May and \$15,738 in June.
- SCWWA's annual total nitrogen (TN) waste load allocation (WLA) is 350,239 lbs. TN discharged through June 2021 was 222,702 lbs. We have a contract with Chesterfield to purchase 50,000 credits to cover any WLA overage.
- SCWWA's annual total phosphorus (TP) WLA is 28,404 lbs. TP discharged through June 2021 was 12,383 lbs.

➤ Operations

- Plant effluent met all permit requirements for March and April 2021.
- The average daily effluent flow for May was 9.87 mgd and June was 11.87 mgd. Precipitation totals in May was 1.68 inches and June was 5.64 inches.
- Staff continues to monitor the biosolids and are working with NutriBlend to ensure timely removal.

- On July 8th, one of our operations staff noticed a strong chlorine odor at the primaries. The operations staff promptly grab samples and confirmed there was a high concentration of chlorine entering the plant. Our operators monitored the influent and were able to contain the chlorinated influent and protect the treatment process.
- On June 25th the SCWWA hosted a Safety Rodeo for both the ARWA and SCWWA. Training included Fire Extinguisher, Personal Protective Equipment, Hot Work Permits, and Driver Safety.

➤ Maintenance

- One of the HDPE Sodium Hypochlorite tanks was repaired. An outside vendor was able to weld the flange. Staff are currently evaluating the repair. Quotes are also being obtained in the event tanks need to be replaced.
- Parts for the RAS pump repair have been received. The wear ring was installed on July 13th.
- Blower 4 motor tripped on vibration. Staff removed the motor and sent it to the shop for diagnosis.
- A new 2" line is being put on the Non-Potable Water system. This line will allow operators easier access to the line for cleaning.
- Instrumentation Technicians were reassigned to the maintenance department.

➤ IT

- PLC3 (Programmable Logic Controller) A and B have been installed and are operating properly.
- Purchase order for PLC2 upgrade has been issued.
- Once the vendor has completed the installation of the additional lights and cameras our IT staff will add the cameras to our network. Additional switches have already been purchased and installed in preparation.

➤ Laboratory

- Pretreatment inspections continue.
- Replacement fume hood is onsite, and we are awaiting installation.
- The laboratory passed all proficiency tests for certified testing parameters.
- SCWWA is participating in a study to determine the presence of the SARS-CoV-2 virus in wastewater. Laboratory staff have been collecting samples and sending them to Biobot Analytical, Inc.
- Following up on the July 8th release of hypochlorite from one of our pretreatment industries. The industry was identified, and reports have been provided to DEQ. A notice of violation will be issued for this release.

➤ Drain Pump Station

- Awaiting delivery of the drain pump station and shelter.
- Engineer is waiting on shop drawings.