

AT A MEETING OF THE NEW RIVER RESOURCE AUTHORITY
HELD ON SEPTEMBER 22, 2021 AT 10:00 AM,
NRRA ADMINISTRATION BUILDING,
DUBLIN, VIRGINIA:

PRESENT: Mr. Barry Helms, Chairman
Mr. Paul Baker, Vice-Chair
Mr. Robert Asbury, Member
Dr. Chris Kiwus, Member
Mr. Andy McCready, Member
Mr. Tom Starnes, Member
Mr. Tye Kirkner, Member
Mr. Jared Linkous, Alternate

ABSENT: Mr. Jonathan Sweet, Member

STAFF: Mr. Joseph Levine, NRRA Executive Director
Ms. Marjorie Atkins, NRRA Recording Secretary
Mr. David Rupe, NRRA

ATTENDEES/
GUESTS: Mr. Brian Tew, Thompson & Litton
Mr. Andrew Monk, Thompson & Litton
Mr. Chris Hale, Kalsor IT Consulting

Chairman Helms called the meeting to order at 10:00 am.

Mr. Baker made the motion to approve the agenda.

Mr. Helms noted that he would like to remove the Closed Meeting from the agenda. Dr. Kiwus and Mr. Asbury requested that an item regarding audit be added to the agenda. Mr. Helms stated Audit would be added as Item F. under the administration section.

The motion to approve the September 22, 2021 Agenda with amendments was made by Mr. Baker. The motion was seconded by Mr. McCready and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

Mr. Helms opened the floor for comments regarding the New River Resource Authority "Board Code of Ethics". Mr. Helms noted that the first bullet point on page 1, needed to remove the words "laws" and "ordinances". Mr. Kirkner stated that he would like to present a handout of suggested revisions. (A copy of this handout is included with these minutes.) The revised copy added "Staff" and "managerial staff" to the code. Mr. Baker noted that staff are at will employees and subject to state codes, laws and policies of the Authority. Mr. McCready noted that on item 12, he would like to tighten up the language regarding contractors and vendors trying to influence Board members. Mr. Asbury stated that item 12 undergirded the conflict-of-interest statement that all board members have to file annually. Mr. Asbury and Mr. McCready agreed that language about the annual filing by individual board members should be added to the language of item 12.

Mr. Starnes noted that item 15 would prohibit a board member from talking to another member jurisdiction or talking/asking about whether a board member should/shouldn't be appointed/reappointed. Mr. Starnes added, that item 15 was not needed. Mr. Helms suggested adding the word "positive". "Does not preclude any positive comments"... Mr. McCready suggested adding "negatively" before influence.

Dr. Kiwus noted that NRRA Board members have responsibilities to NRRA and their member jurisdiction and that he would like to see wording regarding that included noting that sometimes there may be conflicts between the needs of NRRA and the member jurisdiction. He noted that maybe the appropriate State Code Section should be referenced. Mr. Asbury suggested, "NRRA Board Members acknowledge they carry the unique responsibility of representation of their member jurisdictions and the weight of the actions of the NRRA Board and responsibility for the Authority; by doing what is in the best interest of NRRA and its mission for disposal of solid waste." Mr. Asbury noted that most local governments have a model. Dr. Kiwus said that would complete the circle showing no conflict of interest. Mr. Kirkner said he had been researching the state code and would continue to do so. Mr. Helms thanked Mr. Kirkner for his continued work on the document. Item 17 will be added "dual responsibilities.

Mr. Helms stated that he did not think staff should be included in the revision. Mr. Baker agreed. Mr. Helms noted as Town Manager of Christiansburg, he was not included in the council's code of ethics. Mr. Starnes stated that the City Manager in Radford was not included in the council's code either.

To ensure consistency in the policies/codes, a copy of the Authority's Personnel Policies will be sent to all Board members.

Mr. Asbury thanked the Chairman for his efforts on the Code of Ethics.

As introduction to the Waste Rate Study and Financial Model (a copy of the report is attached to these minutes) from Thompson and Litton, Mr. Levine stated that the Authority has conducted tip fee analysis in prior years. During the process this year the Authority received a letter from Pulaski County PSA requesting a hold on rates for thirty-six months. Thompson and Litton removed the customer's name and included the tonnage in the analysis with the potential revenue. Mr. Linkous added that the PSA also had support for this request from the Pulaski County Board of Supervisors and the Town of Pulaski.

Mr. Brian Tew presented copies of the report to the Board. Page 2 displayed rates from other facilities in the area. Waste rates ranged from \$36.15 per ton to \$61.00 per ton. The Authority's current rate is \$34.00 per ton. National and Virginia averages were also discussed. Mr. Tew shared that Thompson and Litton does a lot of work on water and sewer projects. When funding is needed on a water project they go to VDH. VDH requires that rates be in a specific area or they will not loan the money. The rates must be in place to ensure the revenue stream is adequate for paying the loan back. Localities may also access the tax base for repayment. The Authority operates as an enterprise fund, it is self-funded through its revenue source, waste. The Authority has been able to fund equipment purchases and construction projects, but in the future may need to borrow funds. The banks will take a hard look at those rates.

The Waste Rate Model considered Operating Expenses, Development and Closure costs, equipment costs and Financial Assurance Costs. The model analyzed three previous years of waste rates, revenues and expenses. Previous study analyzed five previous years but due to anomalies in some of those years, the past three years were thought to be more accurate. Goal of the analysis was to maintain current member rates and minimize any potential increases.

Page 5 summarized the assumptions used. Point regarding updated closure schedule due to new DEQ permit requirements were discussed. The estimated closure for NRRRA in these regulations was approximately 5.75 acres every five years. Mr. Asbury noted that compaction was the variable that the Authority could control somewhat. Mr. Monk added that annual volume surveys have to be submitted to DEQ annually for DEQ to determine when closure should occur. It is unknown how DEQ will enforce. Mr. Tew noted that the regulation would have the Authority incur closure costs quicker, potentially lose air space but would make the closure of sections would be a more scheduled event.

Page 6 included a review of the projected waste rate schedule presented in 2020. Page 7 was the three-year analysis of waste received and the percent changed from year to year. Each member's total annual waste received and the percentages were discussed.

Discussion regarding decrease in waste stream was discussed. Mr. Monk noted that recycling has decreased waste streams everywhere. Mr. Tew added that recycling has become more efficient and will continue to effect waste disposed. Trends in waste disposed at landfills will continue to decrease. Private haulers/landfills also impact waste received by the Authority. Mr. Levine noted that the pandemic had also changed the type of waste received (more residential, less industrial) making compaction decrease.

Page 8 presented Scenario 1 Baseline of per ton rates through 2027/2028. Any revenue over runs were placed in the next fiscal year for rate stabilization. Rates would increase each year. Page 10 presented Scenario 2 (with additional 32,000 tons per year for three years) holding rate at \$34.00 per ton. Scenario 2 rates were calculated assuming that the revenue generated from the 32,000 tons per year was guaranteed. Mr. Levine noted that the increased waste stream would not change the overall Authority expenses. The scenario also assumes that operations would be status quo for the next six years (maintain current waste streams for all members) otherwise rates and wastes would have to be revisited.

Mr. Linkous noted that in the past Pulaski County PSA had requested "PDR" money from NRRRA to buy equipment needed to secure a contract for the additional waste stream from the industrial customer but that the PSA was not requesting that, just the holding of rates for thirty-six months. He stated that the PSA has increased rates to purchase the necessary equipment and hire personnel and that the increased tonnage would be beneficial to the PSA and NRRRA.

Mr. Levine noted that the waste streams for all members would have to remain at least the same as in the analysis. Increases in prices for equipment, construction and materials was discussed. Mr. Asbury added that members would be in a "put or pay" situation, having to make up for revenue shortfalls if the tonnage was lower. Mr. McCready added there were too many variables that could not be foreseen to freeze rates. Mr. Kirkner added that the Board had to look at rates and be realistic and that rates would have to increase because everything is going up in price.

Mr. Asbury stated that he appreciated the analysis with all of the many variables so that member jurisdictions are not shocked with large increases. Mr. Linkous added that the PSA's rates have increased but that it now has a sliding fee scale on large volumes as a discount to help obtain additional business.

Mr. Levine noted that the presentation showed real numbers and using unplanned revenue to help stabilize rates.

Mr. McCready stated that the presentation showed rates were sufficient to grant the request, and asked the Board "Do we need to take action on this rate presentation?"

Mr. Helms answered that in the Administration section of the Agenda would be the appropriate time for any action from the Work Session.

Mr. Asbury noted that the Authority could not absorb the costs of a catastrophic event if rates were frozen.

Mr. Monk concluded that Thompson and Litton would provide updates quarterly regarding the information from the presentation.

The motion to approve the Minutes from the July 28, 2021 meeting was made by Mr. Baker. The motion was seconded by Mr. Starnes and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>abstain</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

Mr. Levine noted that on the July and August Check List all checks to "Frontline Logistics" were for tire disposal not "fuels and fluids",

The motion to approve the Check Lists for the months of July and August 2021, with the noted correction was made by Mr. McCready. The motion was seconded by Mr. Baker and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

The motion to approve the Financial Statements for the months of July and August 2021 was made by Mr. Starnes. The motion was seconded by Mr. Baker and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

Mr. Levine presented the Executive Director's Report. 33,276.79 tons of waste was managed in the month of July; 15,979.96 tons in August. Mr. Levine noted that totals (without Roanoke VRA waste in July) was below average for the Authority. Revenues were 28% above projections; expenses were near projections to date. Mr. Rupe and SCS Global continue to work on verification of carbon credits. Mr. Levine is participating in a Fee Study Group in Richmond. The fees are proposed to fund DEQ. The first proposed draft the group has seen would double NRRA's current permit fees. The group is asking DEQ for accountability (costs for a landfill or transfer station inspection). A Waste Diversion Group will meet in October regarding a waste tax, meant to steer out of state waste away from Virginia. Proposed rate is \$5.00 per ton. Staff continues to work with Thompson and Litton to update conceptual plans. RFP's for tire disposal services have been received and are being reviewed. Staff is currently gathering information/evaluating compactors for a purchase. DEQ inspected the facility on August 12 and all previously noted deficiencies had been corrected. Mr. Dan Jensen (known as the Garbage Man) with forty years of experience in the industry visited NRRA and evaluated the facilities and operations. Mr. Jensen will send a report of his visit. NRRA had approximately 120 participants in the September Household Hazardous Waste Day. MRSWA will host an event on November 13.

At 12:15 pm, the Board took a five-minute break.

The meeting resumed at 12:20 pm.

The motion to allow Pulaski County to enjoy a rate of \$24.00 exclusively for James Hardie waste was made by Mr. McCready. Mr. Helms and Mr. Asbury noted that special rates for members was not allowed. Mr. McCready withdrew the motion. Mr. McCready noted that if Pulaski County PSA was successful in adding the new tonnage it would be advantageous to all but there were too many variables. Mr. Linkous stated that the PSA was making a similar commitment and that it would be difficult to go back and enter a contract without a commitment from the NRR Board. Mr. Starnes stated that he did not feel comfortable establishing a rate for the next three years. Mr. McCready asked if the Authority could set a rate for the specific material. Mr. Levine answered, no because the customer is a member. Rate stabilization goal is to try to keep rates stable and all members at the same rate. Mr. Levine recommended not placing guarantees or rates for customers because that would place member jurisdictions in a "put or pay" situation where revenues are guaranteed, no matter what. Mr. Linkous stated that reviewing the scenarios from the rate study, he felt like the potential of risk/reward would be worth it. Mr. Asbury stated that for record, "The Board has considered the request and has gone to considerable effort to obtain information to consider Pulaski County's request. At this time the Authority cannot guarantee a rate but offers the report as information in response to Pulaski County's request and is offered to all other member jurisdictions for their planning purposes. In continuing this discussion, the Board is stepping outside of the role of waste disposal and entering the area of contract negotiation." Mr. Kirkner stated that the Town of Dublin would recommend accepting the County's request.

The motion to accept a member rate of \$24.00 per ton for all members, as requested by Pulaski County PSA, for the next three years was made by Mr. Kirkner. The motion was seconded by Mr. Linkous and failed by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>no</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>no</u>	Mr. Starnes	<u>no</u>
Dr. Kiwus	<u>no</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>no</u>

The motion to ratify Area D, Pay Request 14, in the amount of \$715,847.68 was made by Mr. Baker. The motion was seconded by Mr. Asbury and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

The motion to approve Area D, Pay Request 15 in the amount of \$462,877.82 was made by Mr. McCready. The motion was seconded by Mr. Starnes and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury	<u>yes</u>	Mr. McCready	<u>yes</u>
Mr. Baker	<u>yes</u>	Mr. Starnes	<u>yes</u>
Dr. Kiwus	<u>yes</u>	Mr. Linkous	<u>yes</u>
Mr. Kirkner	<u>yes</u>	Mr. Helms	<u>yes</u>

Total FOIA costs as discussed at the July meeting was \$59,906.38. Mr. Helms stated that after consultation with Mr. Estes, he did not think that the Authority could charge for some of the costs listed. It was agreed that definition of costs eligible and a total would be presented at the October meeting.

Dr. Kiwus thanked the Chairman for adding the Audit to the Agenda. He noted that since he had been on the Board that there had been several questions regarding contributions from and disbursement to member jurisdictions. He proposed adding to the scope of the audit and having the auditor summarize year by year those items.

The motion to increase the scope of the audit to review and summarize member revenues and disbursements to members by year, with running totals and updated in future audits and for the Executive Director to negotiate with the auditor for this service for an amount not to exceed \$7,500.00 was made by Dr. Kiwus. The motion was seconded by Mr. Asbury and approved by a recorded roll call vote of the Board as follows:

Mr. Asbury yes
Mr. Baker yes
Dr. Kiwus yes
Mr. Kirkner no

Mr. McCready yes
Mr. Starnes yes
Mr. Linkous yes
Mr. Helms yes

Mr. McCready left the meeting at 12:50 pm.

Mr. Levine presented the Engineering Section of the Agenda.

Ingles Mountain – No report. Routine maintenance and mowing. Mr. Monk reported that Thompson and Litton is preparing a proposal for an assessment of Ingles Mountain facilities to ensure that the Authority is in compliance with all aspects.

NRSWMA – Mr. Monk reported that Chesapeake Containment will be onsite September 27, to begin liner work. Work will begin on closure area first. Financial Assurance work will be done in October. Thompson and Litton is updating all monitoring plans and is updating the conceptual plan with exhibits. The plan will also include a marketing plan.

West Fork – No report.

The Chairman invited public comments.

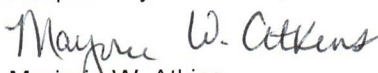
No comments were presented.

The motion to adjourn was made by Mr. Baker, seconded by Mr. Starnes and passed by unanimous consent.

The meeting adjourned at 1:05 pm.

The next regularly scheduled meeting of the Board of Directors of the Authority is scheduled for Wednesday, October 27, 2021, 12:00 noon, at 7100 Cloyd's Mountain Road.

Respectfully Submitted,


Marjorie W. Atkins
NRRR Recording Secretary

Approved at 10/27/2021 Board Meeting.


Barry Helms, Chair

Red----- suggestion to add

Underlined--- suggestion to delete

Green-- General Comments

NEW RIVER RESOURCE AUTHORITY BOARD /STAFF CODE OF ETHICS

The member **jurisdictions and their respective** residents of New River Resource Authority (NRRA) are entitled to fair, ethical, accountable and effective governance. Such a governance requires that appointed public officials:

- Comply with both the letter and spirit of the laws, ordinances and policies of NRRA.
 - Be independent, impartial and fair in their judgement and actions. Use their public office for the public good and not for personal gain.
 - Conduct public deliberations and processes openly.
 - Act with respect and civility.
1. NRRA Board Members and **managerial staff** shall work for the common good of the people of member jurisdictions and not for any private or personal interest. They will treat all **jurisdictions**, persons, claims and transactions in a fair and equitable manner.
 2. NRRA Board Members and **managerial staff** shall at all times refrain from abusive conduct, personal charges or verbal attacks upon the character or motives of other Board Members, boards, commissions, committees, staff or the public.
 3. NRRA Board Members and **managerial staff** duties shall be performed in accordance with the rules **properly** established by the NRRA. A NRRA **Board** Member and **managerial staff** shall respect the decision by the NRRA Board once it has been **properly** made by the **board** majority of the NRRA **Board**.
 4. It is the responsibility of NRRA Board Members to share information that is relevant to any matter under consideration that they have received from sources outside of the decision-making process with all other NRRA Board Members. **Do not recommend because it is unnecessary and a board member should not be expected to "share information outside of the decision-making process" if that information, for example, is direction from the member's jurisdiction.**
 5. NRRA Board Members and **managerial staff** shall interact with one another honestly, forthrightly, truthfully, and respectfully. Discussions shall focus on issues, policies and other substantive matters relating to the function of the NRRA.
 6. NRRA Board Members and **managerial staff** shall respect and preserve the confidentiality of information provided to them concerning the matters of **the** NRRA. **Except to officials of the member jurisdictions which they represent**, NRRA Board Members shall not disclose confidential information without proper legal authorization or use such information to advance their personal, financial or private interests.
 7. To the best of their ability, NRRA Board Members shall represent the official policies

and positions of the NRRA. When representing **solely** their own personal opinions or positions, Board Members shall explicitly state that they do not represent the official position of the NRRA Board **or the member jurisdiction they represent**.

8. NRRA Board and **managerial staff** shall support and maintain a positive and constructive environment for residents, businesses, NRRA employees, and others involved in NRRA activities. NRRA Board Members shall listen to concerns and requests by members and residents and then pass that information to the NRRA Director **and the NRRA board**.
9. Board Members and **managerial staff** of the NRRA have the primary responsibility to ensure that ethical standards are understood and met, and that the public can continue to have full confidence in the integrity of the NRRA.
10. Board Members of the NRRA have the responsibility to intervene when actions of any Member of the **management staff** or Board Members appear to be in violation of this Code of Ethics.
11. Board Members and **managerial staff** shall seek to find and use the most equitable, effective, and economic means for getting a task accomplished.
12. Board Members and **managerial staff** ensure the integrity of the actions of the NRRA Board by avoiding discrimination through the dispersing of, or requesting, special favors or unfair privileges to anyone, whether for remuneration or not. A **Board Member or a member of the managerial staff** should never request or accept for himself or herself or for family members, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of governmental duties or employees.
13. Board Members and **managerial staff** should not make private promises of any kind binding upon the duties of the office, since a public servant has no private word which can be binding on public duty.
14. Board Members **should expose** through appropriate means and channels, corruption, misconduct, or **neglect of duty whenever discovered**. Board Members will follow the procedure of communicating directly with the Authority Chairperson of the Board. On personnel matters or matters relating to incidents, issues or problems, The Board Members and managerial staff will follow the procedure of communicating directly with the Chairperson. Especially in situations where Board Members might conceivably be construed as attempting to supervise, direct or interfere with Authority personnel and the performance of their duties. **The last sentence is too vague and overbroad and it needs to be deleted. It is confusing as to whether all questions and requests for information is to be directed to the Authority Board Chairman only.**
15. **No Board Member who represents another locality, and no managerial staff member, shall, by any means or at any time, contact, directly or indirectly, any official of a member jurisdiction in an effort to influence (1) the appointment (or re-appointment) of that member jurisdiction's NRRA board representative or (2) the position which any NRRA Board Member may take or the way in which such board member may vote on any NRRA issue.**
16. The Code of Ethics shall be affirmed by majority vote of NRRA Board Members during the first quarter of each calendar year.

Adopted by NRRA Board

Chair

Date



Waste Rate Study and Financial Model
PRESENTATION FOR THE NEW RIVER RESOURCE AUTHORITY



**THOMPSON
& LITTON** EST.
1956

ENGINEERS ARCHITECTS SURVEYORS

WASTE RATES FOR OTHER FACILITIES

Waste Rates for Other Facilities					
Description	MSW	C&D	Tires	Clean Wood	ADC
Roanoke Valley Resource Authority	\$53.50	\$62.75	\$155.00	\$35.00	\$25.00
Blue Ridge Resource Authority	\$59.50	\$59.50	\$186.00	\$20.00	-
Bristol Virginia Landfill	\$36.15	\$36.15	\$140.22	\$45.12	-
South Eastern Public Service Authority	\$61.00	\$55.00	\$145.00	-	\$25.00
Northern Shenandoah Planning District	\$54.00	\$63.00	\$1-\$10 each	\$36.00	-
Fredrick County	\$52.00	\$47.00	\$120.00	\$52.00	-
Region 2000 Services Authority	\$40.25	\$40.25	\$2-\$4 each	\$40.25	\$40.25
Carroll-Grayson-Galax SWA	\$55.00	\$55.00	\$100.00	\$55.00	-
Average	\$51.43	\$52.33	\$141.04	\$40.48	\$30.08

- The Environmental Research & Foundation (EREF) maintains a database of 400+ MSW landfills across the United States and publishes an annual report on waste rates based on annual tonnage accepted. The 2020 annual report included the following:
 - National Average Rate: \$53.75 w/ year-over-year change of +3.3%
 - National Average Rate for Medium Landfills (60-390K Tons/Year): \$50.87
 - Northeast Average Rate: \$68.69 w/ year-over-year change of +3.24%
 - Virginia Average Rate: \$53.43 (year-over-year change not reported for individual states)

WASTE RATE MODEL – EXPENSES CONSIDERED

■ Operating Expenses

- Administration Costs
- Professional/Contract Services
- Insurance
- Support Services
- Operations
- Capital Improvement

■ Development and Closure Cost

■ Equipment Cost

■ Financial Assurance Cost

RESEARCH/ANALYSIS PERFORMED

- Analyzed previous 3 years of waste rates, revenues and expenses.
- Evaluated development/closure needs and established future schedule.
- Evaluated equipment needs and established future schedule.
- Evaluated financial assurance requirements to assure compliance with DEQ permits.
- For purposes of this presentation, we analyzed two scenarios which included a baseline analysis (Scenario 1) and the introduction of an additional 32,000 tons/year for a period of three years (Scenario 2).
- Goal of the analysis was to maintain current member rates and minimize any potential increases.

ASSUMPTIONS

- Calculated actual waste stream variation over the last three years and applied weighted averages to each waste stream (member and non-members).
- Assumed construction cost inflation is 5.0% annually as projected by industry experts.
- For Development/Closure schedule, an average annual waste stream of 220,000 tons per year and a compaction rate of 1600 lb/cy was utilized.
- Utilized current DEQ financial assurance forms to calculate requirements and necessary funding.
- Utilized 2.5% escalation for operating expenses year over year.
- Updated Closure schedule due to new DEQ permit requirements (Estimated Closure of approximately 5.75 acres every 5 years).
- Assumed 1.7% inflation rate for financial assurance calculations.
- Utilized any revenue overruns to offset proceeding year expenses.
- Assumed no major regulatory changes in the future that would impact operations

REVIEW OF 2020 WASTE RATE SCHEDULE PRESENTATION

Waste Rate Schedule (\$/Ton)

Description	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Gate Rate	\$32.00	\$32.00	\$34.00	\$36.00	\$38.00	\$40.00	\$42.00	\$44.00	\$45.00
Member Rate	-	-	\$24.00	\$25.00	\$26.00	\$27.00	\$28.00	\$30.00	\$31.00
ADC Rate	\$17.00	\$17.00	\$24.00	\$25.00	\$26.00	\$27.00	\$28.00	\$30.00	\$31.00
MSW / CD Non-Member (Emergency)	\$35.00	\$35.00	\$37.00	\$39.00	\$41.00	\$43.00	\$45.00	\$47.00	\$48.00
VT Ash	\$7.00	\$7.00	\$10.00	\$15.00	\$20.00	\$25.00	\$28.00	\$30.00	\$31.00
Non-Friable Asbestos	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00
Clean Wood	\$20.00	\$20.00	\$25.00	\$25.00	\$26.00	\$27.00	\$28.00	\$30.00	\$31.00
Tires	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
White Goods	\$13.50	\$13.50	\$34.00	\$36.00	\$38.00	\$40.00	\$42.00	\$44.00	\$45.00

WASTE INCREASE/DECREASE CALCULATION

Annual Waste Stream Increase/Decrease and Weighted Average									
Source	Actual Tons	Actual Tons	Actual Tons	Year 1 to 2	Year 2 to 3	Average Annual Change	Total Volume (Tons) (18-21)	Percent of Total Waste Stream	Weighted Average
	18-19	19-20	20-21	Change	Change				
Pulaski County	54,405	54,690	51,999	0.52%	-4.92%	-2.20%	161,094	29.70%	-0.65%
Town of Dublin	2,999	2,935	2,862	-2.13%	-2.51%	-2.32%	8,796	1.62%	-0.04%
City of Radford	12,844	12,523	12,268	-2.50%	-2.03%	-2.27%	37,635	6.94%	-0.16%
Giles County	13,708	14,111	16,187	2.94%	14.71%	8.82%	44,007	8.11%	0.72%
Montgomery County	80,456	84,309	75,694	4.79%	-10.22%	-2.71%	240,459	44.34%	-1.20%
Floyd County	12,050	12,667	12,997	5.12%	2.61%	3.87%	37,714	6.95%	0.27%
Wythe/Bland	3,550	4,288	4,817	20.79%	12.34%	16.57%	12,654	2.33%	0.39%
Total	180,012	185,522	176,825				542,359		

SCENARIO 1 BASELINE - WASTE RATE SCHEDULE

Scenario 1 - Baseline										
Waste Rate Schedule (\$/Ton)										
Description	Actual	Actual	Actual	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Gate Rate	\$32.00	\$32.00	\$32.00	\$34.00	\$34.00	\$34.00	\$36.00	\$38.00	\$40.00	\$42.00
Member Rate	-	-	-	\$24.00	\$24.00	\$24.00	\$26.00	\$28.00	\$30.00	\$32.00
ADC Rate	\$17.00	\$17.00	\$17.00	\$22.00	\$22.00	\$22.00	\$26.00	\$28.00	\$30.00	\$32.00
MSW / CD Non-Member (Emergency)	\$35.00	\$35.00	\$35.00	\$37.00	\$37.00	\$37.00	\$39.00	\$41.00	\$43.00	\$45.00
VT Ash	\$7.00	\$7.00	\$7.00	\$10.00	\$10.00	\$10.00	\$26.00	\$28.00	\$30.00	\$32.00
Non-Friable Asbestos	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$57.00	\$60.00	\$63.00	\$66.00
Clean Wood	\$20.00	\$20.00	\$20.00	\$25.00	\$25.00	\$25.00	\$27.00	\$29.00	\$31.00	\$33.00
Tires	\$100.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$210.00	\$220.00	\$230.00	\$240.00
White Goods	\$32.00	\$32.00	\$32.00	\$34.00	\$34.00	\$34.00	\$36.00	\$38.00	\$40.00	\$42.00

SCENARIO 1 BASELINE - REVENUE VS EXPENSES

Scenario 1 - Baseline							
Revenue vs Expenses							
Description	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Revenue	\$4,985,570	\$4,933,230	\$4,916,130	\$5,270,550	\$5,588,270	\$5,921,170	\$6,252,310
Expenses	\$5,064,900	\$4,997,800	\$4,862,700	\$5,219,800	\$5,659,000	\$5,850,500	\$6,044,300
Amount Applied from Previous Year	\$204,186	\$124,856	\$60,286	\$113,716	\$164,466	\$93,736	\$164,406
Adjusted Expenses	\$4,860,714	\$4,872,944	\$4,802,414	\$5,106,084	\$5,494,534	\$5,756,764	\$5,879,894
Amount Applied to Proceeding Year	\$124,856	\$60,286	\$113,716	\$164,466	\$93,736	\$164,406	\$372,416

SCENARIO 2 32,000 TONS/YEAR FOR 3 YEARS - WASTE RATE SCHEDULE

Scenario 2 - 32,000 Tons/Year for 3 Years										
Waste Rate Schedule (\$/Ton)										
Description	Actual 18-19	Actual 19-20	Actual 20-21	Year 0 21-22	Year 1 22-23	Year 2 23-24	Year 3 24-25	Year 4 25-26	Year 5 25-27	Year 6 27-28
Gate Rate	\$32.00	\$32.00	\$32.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$40.00
Member Rate	-	-	-	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$30.00
ADC Rate	\$17.00	\$17.00	\$17.00	\$22.00	\$22.00	\$22.00	\$22.00	\$24.00	\$24.00	\$30.00
MSW / CD Non-Member (Emergency)	\$35.00	\$35.00	\$35.00	\$37.00	\$37.00	\$37.00	\$37.00	\$37.00	\$37.00	\$43.00
VT Ash	\$7.00	\$7.00	\$7.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$30.00
Non-Friable Asbestos	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$54.00	\$57.00
Clean Wood	\$20.00	\$20.00	\$20.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$27.00
Tires	\$100.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$210.00
White Goods	\$32.00	\$32.00	\$32.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$36.00

- Waste rates were calculated assuming that revenue generated from the 32,000 tons/year is guaranteed.

SCENARIO 2 32,000 TONS/YEAR FOR 3 YEARS - REVENUE VS EXPENSES

Scenario 2 - 32,000 Tons/Year for 3 Years

Revenue vs Expenses

Description	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Revenue	\$4,985,570	\$5,701,230	\$5,684,130	\$5,668,610	\$4,893,870	\$4,885,690	\$5,894,290
Expenses	\$5,064,900	\$4,997,800	\$4,862,700	\$5,219,800	\$5,659,000	\$5,850,500	\$6,044,300
Amount Applied from Previous Year	\$204,186	\$124,856	\$828,286	\$1,649,716	\$2,098,526	\$1,333,396	\$368,586
Adjusted Expenses	\$4,860,714	\$4,872,944	\$4,034,414	\$3,570,084	\$3,560,474	\$4,517,104	\$5,675,714
Amount Applied to Proceeding Year	\$124,856	\$828,286	\$1,649,716	\$2,098,526	\$1,333,396	\$368,586	\$218,576

RECOMMENDATIONS

- **NRRA should establish a universal member rate and gate rate with no differentiation between MSW and ADC**
- **Rates should be examined on a quarterly basis with the budget committee utilizing the model to include waste stream and expense data as available after quarterly volume surveys**
- **The overall goal should be to maintain competitive and fair rates while maintaining solvency for the Authority**