

**RWSA BOARD OF DIRECTORS**  
**Minutes of Regular Meeting**  
**September 24, 2019**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, September 24, 2019 at 2:58 p.m. in the 2<sup>nd</sup> floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

**Board Members Present:** Dr. Tarron Richardson, Kathy Galvin, Mike Gaffney, Dr. Liz Palmer, Jeff Richardson, Lauren Hildebrand.

**Board Members Absent:** Mr. Gary O'Connell.

**Rivanna Staff Present:** David Rhoades, Phil McKalips, Michelle Simpson, Austin Marrs, Andrea Terry, Victoria Fort, Jennifer Whitaker, Scott Schiller, Liz Coleman, Dr. Bill Morris, Dyon Vega, Katie McIlwee, Bill Mawyer.

**Attorney(s) Present:** Kurt Krueger, RWSA counsel

**Also Present:** Members of the public and media representatives.

**1. CALL TO ORDER**

Mr. Gaffney called the meeting to order at 2:58 p.m.

**2. MINUTES OF PREVIOUS BOARD MEETINGS**

*a. Minutes of Regular Board Meeting on August 27, 2019*

Mr. Gaffney invited members to comment or to offer changes.

**Dr. Palmer moved that the Board approve the minutes of the August 27 meeting. The motion was seconded by Ms. Hildebrand and passed unanimously (6-0). Mr. O'Connell was absent from the meeting and the vote.**

**3. RECOGNITION**

There were no recognitions.

**4. EXECUTIVE DIRECTOR'S REPORT**

Mr. Mawyer presented to the Board. He stated they continue to focus on the strategic plan goal of Communication and Collaboration and will have community outreach tomorrow with the United Way's Day of Caring, for which they will help to clean up Camp Holiday Trails. He stated he met with the Blue Ridge Homebuilders Association the previous day and discussed both solid waste and the long-range community water supply plan. He stated he attended the Virginia Association of Municipal Wastewater Agencies quarterly meeting during which they discussed the monitoring of the State's nutrient reduction requirements that are being drafted into

47 Phase 3 of the State's water improvement plan, which includes the cleanup of the Chesapeake  
48 Bay. He indicated that wastewater treatment plants will be expected to do more to reduce  
49 nutrients.

50  
51 Mr. Mawyer informed the Board that staff is working on many programs to address the strategic  
52 plan goal of Infrastructure and Master Planning, which includes master plans, easements, water  
53 lines, and leases for the Observatory Water Treatment Plant. He stated an informational pre-bid  
54 meeting will be held Thursday to generate interest in the upcoming Observatory and South  
55 Rivanna WTP construction project. He stated they continue to work diligently on the wholesale  
56 water meter project, for which they will install a meter today, next week they will correct a test  
57 port, and they expect to have all five main meters calibrated in the coming weeks and to start  
58 using the system next month. He stated they will report on the usage by the County and City one  
59 month after the system has been in effect.

60  
61 Mr. Mawyer stated that the Consent Agenda includes a request to reallocate and optimize staff  
62 resources, a draft of general administrative procedures to provide structure and consistency to  
63 some processes, the awarding of a nonprofessional services contract to address the removal of  
64 large trees that may be floating against the dam and to provide investigative services, to  
65 authorize professional engineering services to begin work on the Route 29 water pump station  
66 design at Meeting Street and Airport Roads, and approval of the Observatory Water Treatment  
67 Plant Raw Water Pumping and Piping Upgrade Cost and Capacity Allocation Agreement. He  
68 stated that Mr. Tungate will address the Board about bio-solid waste disposal alternatives and  
69 Mr. Krueger has worked with attorneys from the County, Service Authority, and City, who are  
70 all on board to terminate the Buck Mountain Surcharge.

71  
72 Mr. Mawyer emphasized that staff has been very busy and acknowledged the work of Jennifer  
73 Whitaker, Lonnie Wood, Scott Schiller, Victoria Fort, Michelle Simpson, Andrea Terry, Liz  
74 Coleman, and Dyon Vega. He observed that the weather has been dry, though they are not in a  
75 drought, and the South Rivanna Dam continues to overflow at a trickle, which they are watching.  
76 He pointed out that the northwest portion of the State has been abnormally dry while the middle  
77 James area has seen normal stream flow and reservoir water levels, as of September 22, while  
78 some other areas of Virginia are starting to experience below normal levels. He explained that,  
79 should the water level at South Rivanna drop one foot below the dam, they would increase  
80 production to the Observatory treatment plant. He stated they are currently making about  
81 10M/gallons per day at South Rivanna and 2M/gallons per day at Observatory. They want to use  
82 all the water at South Rivanna that they can since it has been overflowing, and should the water  
83 level at South Rivanna drop they would increase production at Observatory to 4-5M/gallons per  
84 day and reduce South Rivanna to 8M/gallons per day. He concluded his report and invited  
85 questions.

86  
87 Mr. Gaffney observed that Wintergreen has been under voluntary water restrictions for about 30  
88 days.

89  
90 Dr. Palmer observed that the weather report does not predict any precipitation for the coming  
91 week.

92

93 Mr. Krueger interjected that the Board report indicates the Authority was seeking consent of the  
94 bond trustee to the joint resolution to terminate the surcharge, and stated that they actually have  
95 this now and are all set to go.  
96

97  
98 **5. ITEMS FROM THE PUBLIC**

99 Mr. Gaffney opened the Items from the Public portion of the meeting. As no one came forward  
100 to address the Board Mr. Gaffney closed this portion of the meeting.  
101

102 **6. RESPONSES TO PUBLIC COMMENTS**

103  
104 **7. CONSENT AGENDA**

105 *a. Staff Report on Finance*

106  
107 *b. Staff Report on Ongoing Projects*

108  
109 *c. Staff Report on Operations*

110  
111 *d. Position Reclassification Request- Grounds Maintenance to Civil Engineer*  
112

113 *e. General Administrative Procedures*

114  
115 *f. Award of Nonprofessional Services Contract: On-Call Dam Maintenance Services -*  
116 *Bander Smith, Inc.*

117  
118 *g. Authorization of Professional Engineering Services, Route 29 Water Pump Station and*  
119 *Water Main Project – Short Elliot Hendrickson Engineers*  
120

121 *h. Approval of Observatory Water Treatment Plant, Raw Water Pumping and Piping*  
122 *Upgrade Cost and Capacity Allocation Agreement*  
123

124 Mr. Gaffney asked Board members if they would like to pull any items from the Consent  
125 Agenda.  
126

127 Dr. Palmer referred to #12 under Ongoing Projects: Ragged Mountain to Observatory water  
128 treatment plant raw water line and raw water pump station. She quoted a portion from this  
129 section as follows: “The opportunity to integrate the Observatory water treatment plant raw  
130 water supply line with the proposed South Rivanna Reservoir to Ragged Mountain raw water  
131 main project is currently being investigated as part of the 50-year community water plan ....”  
132 She stated she thought it was a given that the pump station would serve both water lines.  
133

134 Mr. Mawyer replied that the new pump station lies in between the Ragged Mountain Reservoir  
135 and the treatment plant and will replace the two existing pump stations, as the new one would be  
136 capable of pumping raw water from Ragged Mountain to Observatory, would also pump raw  
137 water from Ragged Mountain back to South Rivanna Reservoir, and is one of two pump stations  
38 envisioned for the South Rivanna to Ragged Mountain waterline project.

139  
140 Dr. Palmer asked for confirmation that there will still be one pump station building and the  
141 pumps to transfer water from Ragged Mountain to S. Rivanna WTP will be put in later.

142  
143 Mr. Mawyer confirmed this. He reminded the Board that it had previously requested updates be  
144 in bold and so they have provided project updates in bold in the Ongoing Projects Report.

145  
146 **Dr. Palmer moved that the Board approve the Consent Agenda. The motion was seconded**  
147 **by Ms. Galvin and passed unanimously (6-0). Mr. O'Connell was absent from the meeting**  
148 **and the vote.**

149  
150 **8. OTHER BUSINESS**

151 *a. Presentation: Biosolids Disposal Alternatives; Dave Tungate, Director of Operations*

152  
153 *b. Presentation and Approval: "Joint Resolution" to Terminate the Buck Mountain*  
154 *Surcharge; Lonnie Wood, Director of Finance and Administration*

155  
156 Mr. Tungate presented. He acknowledged that the Board discussed composting and biosolids  
157 disposal during today's RSWA meeting. He noted that this is part of the strategic plan under  
158 Operational Optimization. He presented a photograph of the Moores Creek facility and explained  
159 that the sewage comes in from the Moores Creek and Rivanna pump stations and the sewage  
160 goes through the headworks. He reviewed the different steps of the treatment process and  
161 pointed out clarifiers, aeration basins, digesters, gravity thickeners, and centrifuge. He explained  
162 that biosolids are nutrient-rich organic materials resulting from the treatment of domestic  
163 sewage, which can be recycled as fertilizer to improve and maintain productive soil and to  
164 stimulate plant growth. He stated the Department of Environmental Quality regulates sewage  
165 sludge and biosolids, including the land application program.

166  
167 Mr. Tungate stated that he brought in a sample of biosolids collected the previous day, after  
168 spending 14 days in the digester and passing through the centrifuge, and stated it does not have  
169 an odor. He presented a photograph of sewage sludge in the aeration basin. He next presented a  
170 photograph of the three anaerobic sludge digesters located to the left of the entrance road. He  
171 presented a photograph of the newer of two centrifuges, noting that polymer is added to the  
172 sludge after the anaerobic digester to thicken the sludge, after which it is spun in the centrifuge  
173 and then discharged through a chute and spread out in a truck trailer owned by the Authority,  
174 which is taken by a contractor to McGill Environmental. He stated that Rivanna produces  
175 approximately 14,000 tons annually of Class B biosolids, which have a higher level of detectable  
176 pathogens than Class A. He stated the current contract expires January 31, 2020 and their annual  
177 transportation and disposal cost for the use of McGill Environmental disposal service is  
178 approximately \$600,000 - \$700,000/year.

179  
180 Dr. Palmer asked which sewage treatment plants produce Class A biosolids and what makes the  
181 process different.

182  
183 Mr. Tungate replied that it is heated longer.

184

185 Dr. Palmer asked if they use biological heating or add heat.

36

187 Mr. Tungate replied that they add heat to the digesters to maintain 100°F temperature for 15 days  
188 and then take the sludge and store it in a small storage tank from which it is pumped to the  
189 centrifuge.

190

191 Mr. Gaffney asked what the temperature is for Class A.

192

193 Mr. Tungate did not have this information but offered to find out.

194

195 Dr. Palmer wondered why some treatment plants produce Class A instead of Class B, since it is  
196 going to get composted.

197

198 Mr. Tungate replied that not all biosolids are composted, as some are land-applied, some are  
199 land-filled, and some get incinerated.

200

201 Mr. Tungate presented a map and pointed out the route taken by trucks to go from the Moores  
202 Creek facility to Waverly. He next offered alternatives to their current contract with McGill. He  
203 stated they could contract with one of two area full-service disposal providers, Synigrow or  
204 Nutriblend, to compost, land-apply, landfill, and/or incinerate the material, at the discretion of  
205 the provider.

206

207 Mr. Tungate presented biosolids transportation and disposal costs for 2017: 12,945 tons at  
18 \$46.95/ton; and noted that the contract allows for escalator costs to account for factors such as  
09 increases in diesel fuel costs. He stated they could continue to compost at \$50/ton, a landfill –  
210 land-apply option would run \$30 - \$35/ton for 14,000 tons, which would save \$245K/year,  
211 landfill only would cost \$35 - \$40/ton, with potential savings of \$175K/year. He stressed that  
212 these are only estimates obtained from discussions with partners and that a procurement process  
213 would determine the actual costs. He asked for Board guidance and invited questions.

214

215 Ms. Hildebrand asked if there is an advantage from any additional scenarios to produce Class A  
216 biosolids.

217

218 Mr. Tungate stated it would take some extra treatment steps, which they can investigate.

219

220 Mr. Gaffney asked what this would change and if there is a closer location to which they could  
221 take the biosolids.

222

223 Mr. Tungate responded that they didn't price out that option and that they would use the same  
224 landfill.

225

226 Mr. Mawyer interjected that if they were to landfill or land-apply they would not want to incur  
227 the additional expense to make Class A, which would be appropriate if they were to sell it in  
228 bags to residents, since it contains fewer pathogens than Class B. He recalled that RWSA used to  
229 have a sales program for compost made from Class B biosolids.

30

231 Dr. Palmer pointed out that if they were to create Class A biosolids and sell them they would be  
232 competing with Class B for use in fields, which is cheaper than Class A.  
233

234 Ms. Whitaker added that the Class A treatment scenario would be most appropriate for direct  
235 resale, since it has fewer vectors and pathogens.  
236

237 Dr. Palmer noted that some Board of Supervisor members are very much against land application  
238 of biosolids.  
239

240 Mr. Gaffney asked if the City and County would be opposed to land-apply – landfill or landfill-  
241 only, as opposed to composting.  
242

243 Dr. Palmer replied that she suspected that with the Board of Supervisors' new climate change  
244 initiatives they would prefer composting.  
245

246 Mr. Gaffney pointed out the potential savings of \$250K.  
247

248 Dr. Palmer remarked that it will depend upon what price they place on greenhouse gas  
249 emissions.  
250

251 Mr. Gaffney stated that discussion would be a part of the work session discussed at the Rivanna  
252 Solid Waste Authority Board meeting.  
253

254 Dr. Palmer agreed.  
255

256 Mr. Gaffney asked for the typical length of time of a contract with a hauler.  
257

258 Mr. Tungate replied that the contract has been renewed since 2015 and they are now required to  
259 place it out for bid. He stated that in the past they have done one-year contracts with two or three  
260 renewals.  
261

262 Mr. Krueger clarified that they must commit to at least a one-year contract and can have options  
263 to renew.  
264

265 Mr. Mawyer pointed out that with a longer term commitment you tend to get a better price than  
266 with a one-year contract.  
267

268 Mr. Gaffney emphasized that since the City and County want to hold a work session on this topic  
269 they can't lock up a contract for too long a period. He estimates it will take about two years for  
270 them to make a decision so a contract up to two years would be appropriate.  
271

272 Dr. Palmer suggested a one-year contract with options to renew.  
273

274 Mr. Krueger pointed out that they would likely receive a better price from McGill if they were to  
275 commit to two, three, or five years.  
276

277 Dr. Palmer stated she can bring this matter up for discussion with the Board of Supervisors,  
278 though she believes she knows what the answer will be as the Board does not support using the  
279 landfill option to save \$175K and will not support land application. She pointed out that the  
280 savings will be shared with the City.

281  
282 Mr. Mawyer added that it is a 50/50 cost sharing component with the City, based on current  
283 retail flows.

284  
285 Dr. Palmer remarked that with their climate initiative they are not going to want to replace  
286 composting with landfill.

287  
288 Mr. Gaffney proposed they seek a two-year contract with three one-year renewal options.

289  
290 Ms. Galvin agreed with this proposal, as City Council is not prepared to conduct an exhaustive  
291 review of this and has an RFP out, for what will be a more regional approach.

292  
293 Mr. Mawyer pointed out that, under the middle hybrid option of land-apply/landfill, they may  
294 have to landfill the material during some winter months when there is snow cover, though they  
295 have quantities that must be disposed of almost every day. He added that Department of  
296 Environmental Quality has a list of approved sites that can accept biosolids for land application.

297  
298 Ms. Galvin pointed out that the City has less agricultural surface area.

299  
300 Mr. Tungate added that biosolids from other municipalities are applied in Albemarle County.

301  
302 Ms. Hildebrand remarked that there would have to be very large tracts of land that have a need  
303 for nutrients.

304  
305 Dr. Palmer recognized that this is a political issue and also has health-related aspects. She stated  
306 there are those on the Board of Supervisors who don't believe DEQ should allow for land  
307 application of biosolids, though she acknowledged that she does not know enough about the  
308 pathogens to be able to speak to this.

309  
310 Mr. Mawyer reminded the Board that in 2010 it considered the same question and decided to not  
311 allow land application of Rivanna biosolids. He stated they can continue to compost for a couple  
312 of years and see where it goes from there.

313  
314 Dr. Palmer remarked that they may find a private company that wants to do this and they just  
315 don't know how this is going to evolve.

316  
317 Mr. Mawyer remarked that Harrisonburg-Rockingham Regional Sewer Authority (HRRSA) has  
318 a large wastewater treatment plant and land applies 100% of its biosolids.

319  
320 Mr. Tungate added that HRRSA has just begun a new treatment process and produces Class A  
321 biosolids.

322



323 Mr. Richardson attempted to summarize the Board's position. He stated he has heard that the  
324 Board would explore going from Class B to Class A biosolids.

325  
326 Mr. Gaffney added that they need to learn what the Board of Supervisors thinks, since if they  
327 still don't want to do land-applied then it doesn't make sense to spend more money to treat it.

328  
329 Mr. Mawyer informed the Board that he will present on the matter of terminating the Buck  
330 Mountain surcharge. He reminded the Board that staff presented to the Board in June on this  
331 issue. He reminded them that they acquired 1,300 acres for the proposed Buck Mountain  
332 Reservoir, found the James Spiny Mussel, they could not construct a water supply reservoir, and  
333 have used 600 acres preserved as a mitigation effort for the environmental impacts of the Ragged  
334 Mountain Reservoir Dam project.

335  
336 Mr. Mawyer stated the 1983 agreement between the City and Service Authority asked Rivanna  
337 to buy the property and the City and Service Authority committed to the imposition of a Buck  
338 Mountain Surcharge for every new water connection in the City or County, with these funds to  
339 be transferred to Rivanna to help pay for the bonds, which they have been for the last 36 years.  
340 He stated the bonds have been paid off, they feel that it is time to terminate the surcharge, and a  
341 joint resolution has been drafted by Mr. Krueger, after conferring with City, County, and Service  
342 Authority attorneys. He continued that, should the Board approve the resolution, it would then be  
343 taken up by the Board of Supervisors, City Council, and Service Authority. He stated the  
344 surcharge fee is about \$230 for a 5/8" lot residential connection and increases with larger meter  
345 sizes.

346  
347 Mr. Krueger emphasized that they can't say exactly when the bonds have been paid off, due to  
348 the way they were refinanced before Lonnie came on board, and there is no way to trace it,  
349 though they all know that at this point it has been paid. He stated they need to certify to the bond  
350 trustee that the elimination of the surcharge would not have an impact on the Authority's ability  
351 to pay its bond debt and operational costs, which has been certified by the engineer.

352  
353 **Dr. Palmer moved that the Board approve the joint resolution to terminate the Buck**  
354 **Mountain surcharge. The motion was seconded by Ms. Galvin and passed unanimously (6-**  
355 **0). Mr. O'Connell was absent from the meeting and the vote.**

356  
357 **9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

358 There were none presented.

359  
360 **10. CLOSED MEETING**

361 There was no closed meeting held.

362  
363 **11. ADJOURNMENT**

364 **At 3:35 p.m., Mr. Richardson moved that the Board adjourn the meeting. The motion was**  
365 **seconded by Ms. Galvin and passed unanimously (6-0). Mr. O'Connell was absent from the**  
366 **meeting and the vote.**

367  
368



369 Respectfully submitted,

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371

372

373

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**Mr. Jeff Richardson**  
**Secretary-Treasurer**

