

RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
March 27, 2006

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Monday, March 27, 2006 at 2:00 p.m., in the Conference Room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mr. Gary Fern, Mr. Michael Gaffney – Presiding, Ms. Judith Mueller, Mr. Gary O’Connell, and Mr. Robert Tucker.

Authority Staff Present: Ms. Anne Bedarf, Mr. Bruce Edmonds, Mr. Tom Frederick, Mr. Chuck Kent, Ms. Mary Knowles, Ms. Jennifer Whitaker, Dr. Robert Wichser, and Mr. Lonnie Wood.

Also Present: Mr. Kurt Krueger – RWSA Attorney, Mr. Ronald Taylor – Hazen and Sawyer, members of the public and media representatives.

1.0 Call To Order

The regular meeting of the RWSA Board of Directors was called to order by Mr. Michael Gaffney on Monday, March 27, 2006 at 2:00 p.m., and he noted that a quorum was present.

2.0 Minutes Of Previous Board Meeting

Upon a motion by Mr. Tucker, and seconded by Mr. O’Connell, the Board of Directors by a 5 – 0 vote approved the minutes of the regular Board meeting held on Monday, February 27, 2006.

3.0 Executive Director’s Report

Mr. Frederick stated that he has attempted to keep the Board and the public informed concerning grant funding for wastewater treatment plant upgrades. This month’s written report contained a “mixed message” concerning funding initiatives in the General Assembly. Outgoing Governor Warner’s request for a \$200 million increase to the Water Quality Improvement Fund (WQIF) was still included in the appropriation to be considered during the special legislative session which convened today. He had also learned through discussions with the Virginia Association of Municipal Wastewater Agencies (VAMWA) that some legislators felt that with the boost to the WQIF, additional funding would not be needed in FY 08. The \$200 million would only provide a fraction of the amount needed to provide matching funds for upgrades to the 125 wastewater treatment plants throughout Virginia. Mr. Frederick added that RWSA would remain diligent in its efforts concerning appropriate grant funding and offered his and

RWSA Board Minutes
3.0 Executive Director's Report (cont.)
March 27, 2006

RWSA staff assistance with any lobbying undertaken by the local officials to assure adequate state funding for wastewater treatment plant upgrades. Mr. Frederick further reported on the status of the Preliminary Engineering Report (PER) related to the upgrade of the Moores Creek Wastewater Treatment Plant. Mr. Ronald Taylor with Hazen and Sawyer was in attendance to address another issue on the agenda, but he could also respond to specific questions concerning this study. It was RWSA's goal to have the plan, which would include estimated costs, completed by mid-summer. The Authority was also still very active in the Nutrient Exchange Association, recognizing the challenges associated with undertaking such an enormous project and the need to develop strategies related to the utilization of engineers and consultants without overtaxing the market.

Mr. Frederick next noted that many of the internal processes being undertaken by RWSA were being supported by integrated resource planning, which several members of the community had been advocating for some time. The Authority has been working closely with the City, County, and other agencies, which included The Nature Conservancy (TNC), on several fronts. One of those projects included reviewing RWSA's utility right-of-way procedures to determine how they could meet the Authority's needs to maintain its sewer system while at the same time be supportive of the environment. RWSA had identified many stream banks in the urban area that had seriously eroded over time and were threatening Rivanna's rights-of-way. Mr. Frederick felt this situation presented an opportunity for a collaborative approach on how RWSA could maintain those sewer transmission lines, as well as develop a community approach for supporting improvements to eroded stream banks. RWSA has been part of a collaborative effort with the City of Charlottesville and TNC in the past month to view the sites and identify possible outside funding sources to preserve the area's urban streams.

Mr. Frederick then reported on the abnormally dry weather conditions being experienced by this community and the region. He stated that stream flows were well below normal for March. RWSA was very closely monitoring the situation. Another example of a collaborative effort has been Rivanna's work with the Albemarle County Service Authority (ACSA), the City, and the County on the development of a drought management strategy. A series of meetings on this issue began last fall. Prior to that time, RWSA through a consultant developed some modeling that allowed the Authority to employ a risk-based approach in preparation for drought management. Another meeting was scheduled for early April with the hopes that a written drought management plan could be written and made public this spring. Even though the document has not yet been finalized, staffs from those organizations have been in active discussions in preparation for implementing more immediate measures if necessary. Actions required to address drought conditions would be taken early and proactively.

Mr. Frederick next commented that during the past week, RWSA had requested its consultants to update that modeling to reflect real current conditions. The consultants had reported that although the stream flows were down and close monitoring was warranted, it was not yet an emergency situation. He then explained that in a "worst-case

scenario” if dry conditions remained into the summer, RWSA projected that somewhere between

RWSA Board Minutes

3.0 Executive Director's Report (cont.)

March 27, 2006

Memorial Day and Independence Day the area would be faced with implementing some type of drought measures with the possibility of following up with some restrictions. It might not be necessary to take any measures if substantial rainfall was received this spring. Mr. Frederick also suggested that since it was spring planting season that citizens should be aware of their water usage in anticipation of drought conditions.

Mr. Frederick further reported that the date for the next Public Outreach Meeting for the Community Water Supply has been set for Tuesday, April 18, 2006 at 7:00 p.m. in the Forum at Monticello High School. The preferred alternative would be announced at that meeting.

Mr. Gaffney thanked Mr. Frederick for his report.

4.0 Items From The Public

Ms. Lois Rochester, Albemarle County resident, commented that she was delighted with the progress being made on the Drought Management Plan. She then noted a sentence in Mr. Frederick's report that read: "I would strongly urge all our citizens to think and practice 'water conservation' now and recognize there is a higher than average probability that this year could be a drought year." She then inquired how this message could get out to the citizens now. Ms. Rochester had some suggestions, but rather than take time away from this meeting, she would forward her written comments to Mr. Frederick. She felt this was critical since some of the citizens had been requesting this early warning message before and felt it would be very timely.

Mr. John Martin, resident of Free Union, Virginia, stated that he seconded Ms. Rochester's comments and added that the citizens have been interested in and have been calling for a Drought Management Plan since before the drought of 2002. He felt citizens would be appreciative of the opportunity for some kind of public participation, input, or review and might provide some additional insights.

Mr. Martin next stated that the second matter he wanted to address concerned the Moores Creek Wastewater Treatment Plant draft permit. The permit was "on the street" for public comments at this time, which were due next week. He had gone to Harrisonburg to review the file "pursuant to the invitation that was contained in the notice." Mr. Martin had talked to a DEQ official while there who made the comment that the "Rivanna Water & Sewer Authority is the most knowledgeable water utility by far in its jurisdiction." Mr. Martin had felt that since the notice was published in *The Daily Progress*, RWSA had "signed on" to all the terms of the draft permit. After he had reviewed the file, he found that it was not necessarily the case. It appeared that there was still a point of contention as to whether or not the draft permit should contain a compliance deadline of January 1, 2011 for implementing the wastewater allocation provision. Mr. Martin felt that it was Rivanna's theory that the General Permit would take care of that matter and that it did not need to be in the draft permit. When the General Permit was finalized, it would "trump" everything that was in the draft permit. Before Mr. Martin submitted comments next week, he and possibly some others at this meeting wanted to know whether or not RWSA had come to a position on whether it was

RWSA Board Minutes
4.0 Items From The Public (cont.)
March 27, 2006

going to agree with the draft permit with the inclusion of that provision or whether Rivanna would contest the document by submitting comments to DEQ. He further stated that based on his review to this point, he did not see any problem with the draft permit. If RWSA planned to contest the compliance provision, Mr. Martin would submit comments concerning his opinion that the provision should be included in the document in the event there was some kind of holdup on the General Permit. He would appreciate if RWSA would announce what its official position was on the draft permit.

Ms. Allison Ewing, 1900 Chesapeake Street, Charlottesville, VA, next thanked RWSA staff for all their work on the Rivanna Pump Station. She felt the Authority was very helpful and very responsive to the Woolen Mills neighbors. She expressed her appreciation for RWSA's willingness to work so closely with their neighborhood association.

Ms. Ewing then commented that she was present today to discuss the compost facility. She was the former President of the Woolen Mills Neighborhood Association and once the "repository" of all neighborhood complaints. The complaints had been growing during the time she served as President. She lived in the Woolen Mills neighborhood for six years and noticed that the smell had gotten stronger. She attributed the increase in odor to the growth in the City and the County. When the Moores Creek facility was first put in this location, she imagined that the thinking was that there were not that many people who lived in this area. As a result of the growth of the area, the facility was now very close to the center of the City. While everyone in the City and some residents in the County contributed to the problems, the adjacent neighborhoods consisting of Franklin Street, Belmont, and Woolen Mills areas bear the burden of the smell. Ms. Ewing felt there was a fairness problem associated with this odor issue.

Ms. Ewing further stated that many residents have expressed health-related issues resulting from the smell, such as headaches and sore throats. When the smell was strong, she would immediately get a sore throat when she went outdoors. From a web search she learned that there were other communities around the country situated next to bio-composting facilities whose residents were complaining of similar health issues.

Ms. Ewing next commented on the impact of the odor on the quality of life for the neighborhoods. She stated that the residents would love to enjoy being on their decks and barbecuing outside. She was not able to invite guests for an outdoor gathering because she was embarrassed by the odor.

Ms. Ewing then discussed the odor's impact on property values. There were concerns that the smell would discourage potential buyers of their properties and thus lower their property values.

Ms. Ewing added that she had received promises that there would be no smell, which might have been true initially. With the continued growth of the area, the odor problem also continues to grow. The neighborhood association realized that solutions were costly. They were sorry for the costs involved but felt that RWSA had a responsibility to solve

RWSA Board Minutes
4.0 Items From The Public (cont.)
March 27, 2006

the odor issue. In summary, Ms. Ewing stated that discussions concerning this matter have been going on for years, the problem has only worsened, the neighbors felt there was a health risk, and their quality of life has been impacted.

Mr. Bill Emory, 1604 East Market Street, next distributed a handout to the Board members. He then thanked the Board members for their service to the community and their efforts through RWSA to mitigate the effects of an increasing population on the Charlottesville-Albemarle area. He then commented that in 2003 the Mayor of Charlottesville, Mr. Maurice Cox, challenged City leaders in the Woolen Mills neighborhood by stating that “I think it is long overdue for the Woolen Mills that they have a clear signal of where their neighborhood was going and that it not be done in this piecemeal process.” Mr. Emory hoped that given the talent residing in that neighborhood that the group would decide to proactively convey the future direction of that neighborhood and that there would not continue to be an erosion of the residential and mix-use strategies that they had envisioned.

Mr. Emory further commented that he personally longed for the time when businessmen built their residences next to their places of business and became members of the neighborhood, sharing both the positive and negative affects their endeavors had on the quality of life in the area they “called home.” This was the case 100 years ago when Henry Clay Merchant lived on the hill at the intersection of Moores Creek and the Rivanna River. Mr. Merchant was the directing force for the Charlottesville Woolen Mills, and his house overlooked his place of business. The neighborhood took its name from Merchant’s enterprise. The business was “the sea around which the neighborhood coalesced.” Although Woolen Mills was often considered by some people as an industrial neighborhood, it was really a residential neighborhood, whose residents historically walked to work. Merchants and industrialism fit well with the “arboreal garden at the base of Monticello Mountain.” The industrial park that lined Broadway Street between RWSA and the Woolen Mills neighborhood was at that time a recreational park. His 97-year-old neighbor remembered watching baseball games played at that park, and a 69-year-old man recalled playing shuffleboard there in the mid-40’s. The wisdom of the City and the County could be questioned with locating the heaviest industry in this region at the foot of Monticello Mountain in the view of “the crown jewel of Central Virginia tourism.”

Mr. Emory next stated that the Woolen Mills neighborhood shared its southeastern boundary with Albemarle County. “Living on an interjurisdictional boundary is a dangerous affair.” The neighborhood’s County Supervisor was Mr. Lindsay Dorrier, and his most distant constituents were the residents of the Merchant house. He wondered, “does Mr. Dorrier feel and smell their pain.” Visitors to his house in the Woolen Mills neighborhood wondered why Mr. Emory did not ask his City Councilor to address the smell issue. The neighborhood has asked the City Council for relief from the corrosive effects from the industry located to the South of the Woolen Mills area. The requests for relief from the cut-through traffic and the smells have been occurring since Mr. Emory moved to the neighborhood in 1987.

RWSA Board Minutes
4.0 Items From The Public (cont.)
March 27, 2006

Mr. Emory further commented that in 1918, Woolen Mills bought its first internal combustion vehicle. In May 2005, during a 24-hour period, 14 septic tank pumping trucks shortcut through the Woolen Mills neighborhood to access the place where they dump their loads. In the same 24-hour period, 32 vehicles “emblazoned with a RWSA logo” traveled through their residential streets. During his vehicle count, he failed to note whether the air smelled of composting Biosolids.

Mr. Emory also remarked that in the summer of 1916, the City’s main sewer pipe that ran from Charlottesville to the Rivanna River broke. Quoting from Andy Meyers’ article about the Charlottesville Woolen Mills working life, he stated, “Foul odors wafted across the mill village from the leak. The stench ended only with the arrival of the coldest winter in 20 years. The leak was referred to in the Woolen Mills board minutes taken during the summer of 1917 one year later.” Mr. Emory commented that apparently the City was in no hurry to repair the failed pipe.

Mr. Emory added that it was his opinion that the current odor problem came close to meeting the definition of a public nuisance, which was described in state law as “an act that is injurious to health and indecent or offensive to the senses and interferes with the comfortable enjoyment of life and property.”

Mr. Emory then stated that in 1916 and 1917 the City responded slowly to complaints from the Woolen Mills neighborhood regarding odor. The area had not been annexed then; “we were woolies, lint heads and Albemarle County residents.” He asked that the neighborhood be shown that times have changed and that action be taken this current year to address the smell issue by fast-tracking the enclosure of the compost shed and “transforming this mother of all outhouses from a source of community pain to a source of regional pride.”

Mr. Michael Laskoe next commented that he lived in the section of Woolen Mills that was located in the County. He stated that he was also in attendance to address the composting facility. He has a 10-year-old daughter who on bad days ran from the house to the car and from the car to the house holding her nose. Before they purchased their home, they asked a resident who had lived in the neighborhood for five years about the odor issue. The resident responded that “it got really bad infrequently.” He did not feel that any residence in attendance today would describe the odor frequency as “infrequent” now. He further stated that “it didn’t take a rocket scientist to see that the solid waste process has grown over the years.” The growing frequency of noxious odors correlated with the growth of the amount of solid waste processed by the facility. The new standards set for municipal waste would result in an increase in the amount of solid waste that had been projected previously. RWSA has been a very good neighbor. The neighbors were asking that the Authority accept that the original premise behind the design and operations of the composting facility were out of date and no longer valid. He requested that the Board attend to this problem.

RWSA Board Minutes
4.0 Items From The Public (cont.)
March 27, 2006

Mr. Laskoe also stated that he was told that last year the facility sold out of compost and that the largest customers were commercial operations. This would lead him to suggest that pricing policies could be altered that would further offset the cost of the mitigation, whether it was enclosing the facility or moving the operation elsewhere.

Mr. Laskoe added that he was also requesting that while the Authority was evaluating long-term permanent solutions, it also explore interim measures to prevent the odor problem from becoming worse before it was finally solved.

Ms. Victoria Dunham, who resided in the Merchant House, next commented that she did not have a prepared statement due to an emergency at her house. She stated that she wanted to look at the bigger picture, which included the pumping station, the composting yard, and the massive generator located next to her house. Her house pre-dated RWSA's facility by 144 years. The Authority located the Moores Creek plant next to her house and not vice versa. Although the pumping station has been fixed, she remembered the many years of complaints that preceded the corrective action.

Ms. Dunham then stated that she was very glad to be able to talk about the composting yard today, but she had lived in the neighborhood for 14 years and had been complaining about it for 14 years. Staff who worked here previously did not take her complaints seriously. The neighbors were sometimes told by staff that "we were imagining" the odor. Ms. Dunham brought letters from her tenants concerning the odor issue. The odor problem needed to be addressed, and it needed to be taken care of "hopefully yesterday."

She realized that was not possible, but it needed to be resolved with no more lengthy promises and studies. The neighborhood needed to know that RWSA was "on board" and would take care of the problem. Ms. Dunham further commented that she lived on the ridge, and by the time the smell reached the rest of the neighborhood, they were "hammered." There was a 24-hour period when they were continuously affected by the strong odor. She suggested getting next to the compost pile as it was composting and inhale deeply in order to get an idea of the odor that the neighborhood was experiencing. She described it as a burning, acrid odor that came into her house. She no longer invited guests to her house, which was situated on 1-1/3 acres with an orchard, because of the odor problem. She was "begging" that the odor issue be considered very seriously with no more promises and that the matter be resolved.

Mr. Chris Hayes, 1900 Chesapeake Street, next commented that he had worked closely with Dr. Wichser for two years on the Rivanna Pump Station. He and most of the neighbors were pleased with the results of the collaborative effort with RWSA and the designers, working towards a solution that "everybody could be excited about." He offered again his willingness to cooperate and collaborate, as well as others, to assist with finding a solution. When the pump station project first began, it was a neighbor on his block that found a new system that had not been studied for Charlottesville and had proposed looking at some alternatives. As a result, a carbon filter system was eventually installed at the pump station instead of the biofilter. Mr. Hayes added that whatever collaborative efforts were needed in order to accelerate the process, he offered to

RWSA Board Minutes

4.0 Items From The Public (cont.)

March 27, 2006

be the “first to jump in.” He felt there would others that would be interested in assisting with this process.

Ms. Laura Covert, who was Co-President of the Woolen Mills Neighborhood Association and resided at 1809 East Market Street, next commented that she wanted to reiterate her neighbors’ statements at today’s meeting. She also referenced paragraph 5 of the Board report, which she felt addressed “pretty concretely” that the composting facility was built as a cheap solution to a problem that worked for a while. After re-reading the paragraph, she felt that the current facility was too small for the amount of waste that was generated.

She drew attention to that paragraph in the hopes that when RWSA moved forward with plans to address this issue, the Authority would look to the future and develop long-range solutions instead of a “quick fix” to the problem. The neighbors were also interested in developing a short-term remedy since what used to be a “handful of days during the year bothersome smell became a handful of days during the week bothersome smell.”

Mr. Gaffney thanked the members of the public who provided input at today’s meeting. He felt it was valuable information and appreciated their group effort.

5.0 Consent Agenda

Mr. Gaffney asked if there were any items that the Board members would like to pull for questions or further discussion from the Consent Agenda.

- 5a) Staff Report on Finance
- 5b) Staff Report on Operations
- 5c) Staff Report on On-going Projects
- 5d) Scottsville WTP Filter Upgrade

Upon a motion by Mr. Tucker, which was seconded by Mr. O’Connell, the Board of Directors voted to approve Items 5a), b), c), and d) of the Consent Agenda. The motion was approved by a 5 – 0 vote.

6.0 Other Business

In regards to **Item 6a), Moores Creek Wastewater Compost Facility**, Mr. Frederick stated that this report followed up on many of the comments just received from the public on this item. As this issue moved more and more to the forefront, RWSA engaged in a study in an effort to look fairly, appropriately, and without any preconceived biases at the current situation of the compost facility. This report attempts to encompass that information.

Mr. Frederick then pointed out that earlier this month Dr. Wichser had put forth a lot of time and effort into gathering feedback from citizens concerning the odor issue. Hazen and Sawyer was retained to conduct a study of the compost facility. Due to the abbreviated time frame, the firm only had about one week of effective time to conduct the study and address these issues. Mr. Frederick would not pretend that this report answered or resolved all the questions related to this issue. RWSA would be recommending that the Board authorize the additional time and some funding to more thoroughly address the

RWSA Board Minutes
6.0 Other Business (cont.)
March 27, 2006

odor issues. He noted one of the comments from the Woolen Mill neighbors during the Public Comment period concerning looking for a long-term solution and not a quick fix, which he felt was consistent with the staff recommendation on this issue.

Mr. Frederick further commented that it was RWSA's intent to conduct this study with an open mind and did not take any exception to the viewpoints and concerns that were just voiced by the Woolen Mills neighbors. He felt that in order to focus on the issue, it was important to understand that he and the current staff were committed to taking all possible measures through its operating procedures by utilizing industry-proven best practices to manage this facility as responsibly as possible. Mr. Frederick added that it was a personal commitment that he made when he came to this organization and had conveyed to the staff.

Mr. Frederick next reported that as part of that effort, there have been several internal and outside audits to identify the best ways to operate the facility. The results of those audits led to improvements in six standard operating procedures that were listed in the third paragraph on page 2 of the report and included the use of finished compost as a biofilter. RWSA has worked very hard on implementing "low hanging fruit" improvements, which were without major capital expense, in order to minimize the issues and concerns of that facility. He had heard a call again today from the Woolen Mill neighbors for RWSA to manage the odor issue in that manner, which he felt the Authority was already doing within the constraints of the existing facilities on a continuous basis. His statement was not meant to convey that RWSA did not believe that a problem existed. In recognition that there was a problem and given the significant number of efforts from an operational and procedural standpoint, the Authority concluded that it was time to explore capital expenditure options. It was RWSA's goal to finish the job so that the facility would be managed to the point where citizens could state that there was a very high to zero probability, or as close as RWSA could feasibly or reasonably attain, that odor emissions would not exist.

Mr. Frederick next provided a brief summary of the options outlined in the report. He stated that building and fire code requirements would need to be considered with the option of enclosing the compost facility. Ventilation, electricity and fire protection costs would make this option very expensive. The expenses related to that option led RWSA to inquire about a soft enclosure. He felt that RWSA should further explore if a highly responsible facility could be developed at a lower cost. It was not his intent to state that there was a cheap solution, as he did not believe that was the case. By continuing to study this issue further, other options could be presented for the Board's consideration.

Mr. Frederick also stated that the estimated costs for enclosing the compost facility were significant enough to prompt questions concerning whether composting should be eliminated and other options considered for the treatment and removal of Biosolids. Part of the study being undertaken by Hazen and Sawyer could help answer that question by providing the Board additional information on available options. As mentioned in his report, phone calls were made to the nearest incinerator in Hopewell, Virginia and to a landfill in the Richmond, Virginia area to further explore the options related to the

RWSA Board Minutes
6.0 Other Business (cont.)
March 27, 2006

incineration or landfilling of dried Biosolids. Transportation costs would be associated with either of those options. Land application was also discussed in the report, which could be done very cost effectively in rural areas. RWSA contacted the Albemarle County Community Development staff, who raised several questions and issues concerning whether land application would be accepted in this community. Other wastewater facilities throughout Virginia were very concerned about the political climate associated with land application, as there were bills in the General Assembly that would significantly restrict its future usage. Mr. Frederick felt it was important to consider these issues when exploring other options for the long-term future.

In summary, Mr. Frederick stated that in order to recognize that this was an important issue for the Woolen Mills community, RWSA not only identified a budget for the additional study but also included a June 26, 2006 time line for completing the study and reporting back to the Board with additional information. He further commented that odor abatement options that would be explored in further detail would include cost-effective ways to enclose the compost facility, other technology, and other possible locations for the existing facility. Market analysis would also be addressed, but Mr. Frederick cautioned that the Moores Creek Wastewater Treatment Plant produced a product that needed to be disposed of in some manner. The plant could not function and could not meet limits to the stream but for only a very short period of time if there were not a way to treat, handle, and properly dispose of the solids. Any market analysis would need to keep as an objective the continued manufacture of a product that had a market.

Mr. Frederick then introduced Mr. Ron Taylor with Hazen and Sawyer who was in attendance at the meeting. Mr. Taylor was very involved with the study that was the basis of the report provided to the Board, and he would respond to any specific technical questions from the Board.

Mr. Tucker inquired as to the costs for the soft enclosure option. Mr. Taylor responded that Mr. Tucker's question was not specifically addressed in the Hazen and Sawyer study. His firm was charged with addressing solutions that would completely solve the odor problem. There were concerns that a soft enclosure would solve the problem for a great majority of the time but would not completely solve the problem, which was the reason that cost estimates for that alternative were not included in the report.

Mr. Gaffney asked what percentage did the compost operations encompass in this area's recycling rate of about 29 percent. Mr. Frederick stated that it encompassed about 3 to 4 percent. A shift of this large volume of solid waste from reuse/recycling to disposal could possibly lower the recycling rate below the required 25 percent. Mr. Gaffney further inquired if the solid waste could be created as a reuse at the landfill. Mr. Frederick responded that generally wastewater sludge was taken to the landfill for disposal purposes. It was used as daily cover material at the landfill, which DEQ did not consider as a recycling or reuse option. Even though it was used as cover material, there was a fee associated with its disposal. Mr. Wood added that the material would not be allowed at the Ivy site since it was no longer a landfill and would need to be trucked to the Amelia

RWSA Board Minutes
6.0 Other Business (cont.)
March 27, 2006

facility. Mr. Frederick further commented that the estimated costs for landfilling the biosolids included transportation costs.

Mr. O'Connell inquired if the increasing volume of solid waste was creating the increase in odor emissions. Mr. Frederick stated that he would not deny that the increase in flow and the increase of the solid waste volume in this plant was a contributing issue. He referenced comments made during the Public Comment period concerning the evolving wastewater technology. A byproduct of wastewater treatment plants upgrading to tighter limits after technological advancements over the years was the generation of more solid waste. It was not certain that there was a clear meteorological understanding of the occurrence of odors. He envisioned that ambient weather conditions contributed to the incidences of odor. The weather this winter has been much drier and warmer than normal, which could be one of the factors that citizens have been more acutely aware of the odor than previous winters. He felt RWSA's focus should be on developing a solution.

Mr. O'Connell questioned if the recently adopted nutrient requirements would add more biosolids in greater volumes. Mr. Frederick responded that the plant upgrades to remove nutrients would add more sludge to the system. Mr. O'Connell further inquired if there were any interim measures that could be implemented until a long-term solution could be developed. Mr. Frederick stated that RWSA would be receptive to any interim alternatives uncovered by Hazen and Sawyer or from citizens that had not been found and pursued by the previous audits or by RWSA staff. He could not guarantee that any new short-term solutions could be discovered during this detailed study. It has been RWSA's mission to find ways to minimize the emission of odors through operating procedures. If we already knew of other interim measures before today, we would already have implemented them.

Mr. O'Connell then asked if there was any scientific information that indicated limiting the solid waste volume by trucking half of the material out of the plant would reduce the smell. Mr. Frederick stated that the degree of odor reduction on any specific day would be factored by weather conditions. He felt that limiting the amount of solid waste would not have a negative impact and could possibly provide some assistance to the odor issue. Transportation costs would also need to be considered with that option. Mr. Tucker also inquired if the solid waste would be transported after the dewatering phase. Dr. Wichser replied that the solid waste would need to be dewatered first. The sludge would go through an anaerobic digestion process, which took approximately 12 to 13 days. The sludge would then be pumped into a filter press to be squeezed into a solid cake. The cake material would be the product that would either be incinerated, composted, or landfilled. Dr. Wichser added that some of the options that were explored, such as land disposal or landfilling, would require Class B Biosolids. At this time, the Moores Creek facility was manufacturing Class A Biosolids by utilizing the compost process to degrade certain pathogens. The Authority would need to determine if it could meet that Class B Biosolids requirement if the compost facility were not operating.

Mr. O'Connell next inquired as to the latest technology that would be utilized by the

Moore's Creek plant if its operations were to begin "from scratch." Mr. Frederick stated

that different facilities would develop different solutions based on whether they were in a rural or urban environment and what land sites were available. A higher technological solution would probably be utilized at this plant, either composting or a thermal process. An option that was probably not available to this facility involved land application, which was widely used in rural areas as a reasonable economical alternative where there were no political issues to consider.

Mr. Frederick next commented that he respected and appreciated the views expressed today by the Woolen Mill neighbors, who recognized that the product being generated provided a huge benefit but at the same time felt the process should be evaluated and solutions developed to address the odor issue.

Mr. Fern noted that he had the opportunity to tour the compost facility before today's meeting. With his background, he was impressed that in addition to the Class A work that was being done, the Moores Creek facility was able to get rid of all the Biosolids year round. Most facilities had to deal with the remainder of the Biosolids by either trucking the solid waste to a landfill or to an incinerator. He felt that plant was doing everything possible from an operations standpoint to address the odor issue. Mr. Fern added that he would recommend that the Moores Creek facility continue with the Class A Biosolids process as it demonstrated to the community a commitment to produce a product that could be reused.

Upon a motion by Mr. Tucker, and seconded by Mr. Fern, the Board of Directors voted to authorize the Executive Director to select a firm to conduct a more detailed engineering study of options, with a budget not to exceed \$75,000, that includes a more thorough review of odor abatement options, alternative Biosolids handling options, and a market analysis, with a report to the Board of Directors by the June 26, 2006 Board meeting.

Prior to the vote, Mr. O'Connell inquired if the charge to RWSA included exploring short-term options. Mr. Frederick replied that Rivanna was open-minded to any new information uncovered during this process. Mr. Tucker explained that his earlier inquiry concerning a soft enclosure was offered as a possible interim solution. Mr. Fern also commented that enclosing the facility with a soft cover would not eliminate the source of the odors. Mr. Frederick explained that the interim measures that RWSA would be exploring were ways to change its operational procedures. In an enclosed facility the air from the ventilation system would need to be immediately scrubbed in order to avoid creating a serious employee hazard.

As there were no further questions or discussion, the Board of Directors approved the motion by a 5 – 0 vote.

7.0 Other Items From Board/Staff Not On Agenda

In response to one of Ms. Lois Rochester's earlier comments, Ms. Mueller stated that the ACSA and the City were getting ready to kick-off a public information campaign and begin their water conservation discussions.

8.0 Closed Meeting

There was no need for a closed meeting.

9.0 Adjournment

There being no further business, Mr. Fern moved that the meeting be adjourned, seconded by Mr. O'Connell. All members voted aye, and the meeting was adjourned at 2:50 p.m.

Respectfully submitted,

Mr. Robert W. Tucker, Jr.
Secretary-Treasurer