



**Region 2000 Services Authority
Services Authority Offices
361 Livestock Rd
Rustburg, Virginia 24588
April 22, 2015
3:00 p.m.**

Please note address and time change.

Agenda

1. Welcome Kim Payne, Chairman
 2. Approval of January 14 Meeting Minutes..... Kim Payne, Chairman
 3. Auditor Report and Financial Report.....Robinson, Farmer, Cox & Rosalie Majerus
 4. FY 16 Budget..... Clark Gibson
 5. Odor Mitigation Proposals..... Clark Gibson
 6. Liberty University Student Presentation
 7. Discussion on a Public Comment Period
 8. Public Comment Period (if approved)
 9. Consideration of Bank Bids for Next Cell Development Ted Cole
 10. Approval of a Reimbursement Resolution for 2015 Borrowing
 11. Director’s Report
 12. Election of Officers
 13. Setting of a special meeting to approve the Solid Waste Management Plan. May 13, 2:00 p.m. is suggested.
- 5:30 p.m. – Public Hearing start time at the Yellow Branch Elementary School.**



**Region 2000 Services Authority
Services Authority Offices
361 Livestock Rd
Rustburg, Virginia 24588
April 22, 2015
3:00 p.m.**

Working Agenda

1. Welcome Kim Payne, Chairman
2. Approval of January 14 Meeting Minutes Kim Payne, Chairman
(Attachment)
3. Auditor Report and Financial Report Robinson, Farmer, Cox & Rosalie Majerus
 - a. Discussion on closing out two accounts and transferring the money to repay the internal borrowing
 - i. City of Lynchburg Asset Reduction Payment Amount - \$156,171.80
 - ii. Debt Service Reserve Cash (2013) - \$67,000
4. FY 16 Budget Clarke Gibson
 - a. No change in tipping fees from \$28.75 for members and \$38.75 for businesses; increase contract rate to \$28.00
 - b. Tonnages are estimated to be level and unchanged
 - c. Operational expenses are estimated to increase by about 2%
 - d. 2% Employee raises included in the budget
 - e. Services Authority to pay additional 2% health insurance costs
 - f. \$ 162,000 in equipment replacement
 - g. Excess revenue up by 4.3% to \$1.3 million (69.4% Campbell – 30.6% Lynchburg)
 - h. Pay back \$212,000 into the internal loan; pay debt service on 2011 and 2015 borrowings
5. Odor Mitigation Proposals Bob Dick, Tim Mitchell
 - a. Mr. Bob Dick from SCS Engineers (Richmond) will discuss (Attachment)
 - i. Using the current existing leachate cleanout system as the foundation for a pilot project related to gas extraction/carbon filtering system
 - ii. Discussion on a deodorizing system
 - b. Mr. Tim Mitchell, Director of Water Resources from the City of Lynchburg, will discuss land application of sludge. Currently over 18,000 tons disposed annually in the landfill
 - i. \$3 per ton additional to our operating costs if not taken to the landfill
 - c. Lynn Klappich will discuss an engineering concept paper regarding establishing a composting facility on site. (Attachment)

6. Liberty University Student Presentation
 - a. A Liberty University class has been at the landfill and would like to present their project.

7. Discussion on a Public Comment Period (*Attachment*)
 - a. 15 minute period per meeting
 - b. 3 minute citizen comments, may be extended by the Authority
 - c. Pre-meeting sign in requested

8. Public comment period (if approved)

9. Consideration of Bank Bids for Next Cell Development Ted Cole
(*Attachment*)

10. Approval of a Reimbursement Resolution for 2015 Borrowing

11. Director's Report Clarke Gibson
 - a. Update on Lateral Expansion permitting process
 - b. Wetlands Permit received
 - c. Tonnage Report (*Attachment*)

12. Election of Officers for 2015 – 2016
 - a. Kim Payne, Chair
 - b. Frank Rogers, Vice-Chair
 - c. Steve Carter, Treasurer
 - d. Gary Christie, Secretary

13. Setting of a special meeting to approve the Solid Waste Management Plan.
May 13, 2:00 p.m. is suggested.

5:30 p.m. Public Hearing at the Yellow Branch Elementary School

Region 2000 Services Authority

Region 2000 Services Authority Meeting

Bank of the James, 8th Floor

January 14, 2014

2:00 p.m.

Draft Minutes

Board Members Present

Steve Carter Nelson County
Kim Payne..... City of Lynchburg
Frank Rogers..... Campbell County
John Spencer (for Aileen Ferguson)..... Appomattox County

Others

Emmie Boley Region 2000
Gary Christie..... Region 2000
Ted Cole..... Davenport & Assoc.
Susan Cook Region 2000
Clarke Gibson Region 2000
Gaynelle Hart..... City of Lynchburg
Bill Hefty Hefty, Wiley, & Gore
Lynn Klappich Draper Aden
Katrina Koerting News and Advance
Rosalie Majerus Region 2000
Candy McGarry Nelson County
Clif Tweedy Campbell County

1. Welcome and Approval of the October 22nd Meeting Minutes

Chairman Kim Payne welcomed everyone and opened the meeting at 2:00 p.m.

Upon a motion by Steve Carter and seconded by Frank Rogers, the Authority approved the October 22nd meeting minutes unanimously.

2. Report on Special Use Permit Application

Gary Christie reported that on December 1st the Campbell County Planning Commission held a public hearing on the application for a special use permit to allow for landfill expansion on the Bennett property. About 26 residents from the neighborhood spoke.

Comments and concerns included:

- Landfill will mar the landscape
- Project is too large
- Property values will be negatively impacted
- Odor and noise
- Land application to limit the use of sludge
- Health issues
- Concern that Campbell should not be taking other jurisdictions' solid waste
- Environmental pollution

The Planning Commissioners were not willing to consider modifying the application and voted unanimously to deny the application.

Clarke Gibson explained that the withdrawal of the application would have no impact on present operations. However, he would have to take a look at long range planning and schedule accordingly.

Frank Rogers made the motion that the Authority withdraw the permit application. The motion was seconded by John Spencer.

Frank stated that there were a number of comments, concerns, and suggestions raised at the public hearing that warrant consideration on the part of the Authority, and requests that all available options other than expansion on the Bennett property are investigated. Some options are: non-expansion, transfer station, or smaller expansion. Kim Payne noted that there are two categories of issues to be explored, one being the expansion on the Bennett property, and also operational issues at the current landfill.

Campbell County residents concerns:

- 1) Jon Hardie
 - concerned with location of the Services Authority meetings
 - has large economic impact; increase in revenue does not offset quality of life
 - time issue – length of impact on the locality over lifetime of the landfill; not a regional approach
 - impact on property (wildlife, watershed)
- 2) Carl Weiser
 - groundwater contamination
 - health issues
- 3) Erin Harre
 - property values
 - food supply/garden/water contamination
 - odor/sludge
- 4) Thomas Beman
 - asked about odor control study
- 5) Clayton Stanley
 - life invested in property

- 6) Tom Holzknacht
 - requested summer odor study
- (7) Joshua Spence
 - sludge/family health
- (8) Claude Royal
 - lack of efficient recycling

Kim Payne thanked the residents for their comments and advised that the Authority would discuss how to keep them engaged in discussions as they go forward.

3. Financial Report

- Rosalie Majerus reviewed the financial report included in the meeting packet.
- Clarke Gibson presented the proposed budget for FY 2016. He reported that before the final budget is approved he will take another look at the tonnage projections. Member rate and market rate will remain the same. The contract tipping fee will increase by \$2.00 per ton.
- Capital projects include a used street sweeper, a used mini-excavator, and replacing two hand held radios, and permitting lateral expansion at the Livestock Road landfill.

A motion was made by John Spencer to advertise the market and contract tipping fees. The motion was seconded by Steve Carter, and approved unanimously.

4. Financing for Phase Four

Ted Cole presented a preliminary financing schedule proposal for the Phase Four project. This would involve a potential third revenue bond for an 8 million dollar project with the actual borrowing likely a little bit larger. It would possibly be for a ten year term. He is proposing a dual track approach to the financing, where both financing through VRA and bank financing would be considered. VRA has an application deadline of February 9th. They have committed that they would be able to provide a funding commitment by no later than March 20th. Funding proposals would also be submitted from banks.

Kim Payne suggested that the Authority consult with their local attorneys and leadership in their governing bodies to see what their reaction might be to the financing options.

Frank Rogers made the motion, seconded by Steve Carter, that the Authority agrees to file a placeholder application with VRA. Ted Cole, through Clarke Gibson, will provide information that could be shared with attorneys and board leadership about what obligations would be imposed upon their jurisdictions subsequent to the placeholder application if the VRA rate is competitive with the bank rate. The motion was approved unanimously.

Steve Carter made a motion, seconded by Frank Rogers, to issue the financing RFP. The motion carried unanimously.

5. Director's Report

- Clarke Gibson reported that he has a proposal from SCS Engineers for an odor control sampling and evaluation study. The proposal includes sampling for numerous compounds that are typically associated with landfill gas and odors. The study will include recommendations to control odors. Clarke said that he will invite SCS to come to the next meeting to explain their methodology.
- Tonnage Report – Clarke reported that tonnage is tracking a little bit higher than anticipated. He will continue to monitor this and make a recommendation at the next meeting if tonnage projections need to be adjusted for FY 16.
- Lateral Expansion Permitting Process – at present it is going through a wetland permitting process, the DEQ has reviewed the permit application, and Draper Aden is addressing comments from the DEQ.
Lynn Klappich added that SCS is working on the air permit, and Draper Aden also has to update an amendment to the Solid Waste Management Plan. This may require each of the local governments to approve the amendment.

6. Items from the Authority

- Kim Payne asked that staff compile a list of concise, complete issues that have been raised concerning both future expansions on the Bennett property and also operations at the current landfill. At the next meeting he would like to have a discussion exploring how to approach the issues. He also would like some information from the staff and the consultant about best practices to plan ahead.
- It was decided by consensus to hold the next meeting at the landfill.
- Kim also asked for a draft policy for public comment.
- Kim asked about the Authority's website presence. He requested that agendas and financials be accessible on the website.

10. Adjourn – There being no further business, the meeting adjourned at 3:40 p.m.

The next meeting was set for April 22nd at 2:00 p.m., at the Livestock Road landfill.

Approved _____

Date _____

**Region 2000 Services Authority
FY15 Actuals & Proposed FY 2016 Budget
As of 3/31/2015**

Table of Contents

<i>Schedule 1</i>	<i>Revenue</i>
<i>Schedule 2</i>	<i>Expense Summary</i>
<i>Schedule 3</i>	<i>Personnel Expenditures</i>
<i>Schedule 4</i>	<i>Operations & Maintenance Expenditures</i>
<i>Schedule 5</i>	<i>Schedule of Reimbursables</i>
<i>Schedule 6</i>	<i>Balance Sheet</i>
<i>Schedule 7</i>	<i>Capital Equipment Fund</i>

Region 2000 Services Authority
 FY 2015 Disposal Fee Revenue-through 3/31/2015

Attachment No. 3

Schedule 1

FY2016 Contract Rate is \$38/Other rates \$28.75/\$38.75

Tonnage	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget
Tonnage From Member Jurisdictions					
Lynchburg	38,747	29,277	9,470	24.44%	38,747
Campbell	20,222	15,769	4,453	22.02%	20,222
Nelson	8,804	6,944	1,860	21.13%	8,804
Appomattox	5,280	3,803	1,477	27.98%	5,280
Subtotal Member Jurisdictions	73,052	55,792	17,260	23.63%	73,052
Lynchburg Contracts & Other Waste	29,362	18,197	11,164	38.02%	29,362
Market Rate Tonnage	102,932	75,745	27,187	26.41%	102,932
Subtotal Contract and Market Rate	132,294	93,942	38,352	28.99%	132,294
Subtotal Revenue Generating Tonnage	205,346	149,735	55,612	27.08%	205,346
Other Tonnage at No Charge (inert/brush/slag)	13,119	12,335	784	5.97%	13,119
Total Tonnage	218,465	162,070	56,395	25.81%	218,465

Disposal Fee Revenue	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget
From Member Jurisdictions					
Lynchburg	\$ 1,113,971	\$ 841,721	\$ 272,250	24.4%	\$ 1,113,971
Campbell	\$ 581,374	\$ 453,563	\$ 127,811	22.0%	\$ 581,374
Nelson	\$ 253,109	\$ 199,633	\$ 53,476	21.1%	\$ 253,109
Appomattox	\$ 151,800	\$ 109,331	\$ 42,469	28.0%	\$ 151,800
Subtotal Member Jurisdictions	\$ 2,100,254	\$ 1,604,249	\$ 496,005	23.6%	\$ 2,100,254
Lynchburg Contracts & Other Waste	\$ 1,057,021	\$ 654,974	\$ 402,047	38.0%	\$ 1,115,745
Outside Tonnage-Market Rate	\$ 3,988,634	\$ 2,935,166	\$ 1,053,468	26.4%	\$ 3,988,634
Subtotal Contract and Market Rate	\$ 5,045,655	\$ 3,590,140	\$ 1,455,515	28.8%	\$ 5,104,379
Total	\$ 7,145,909	\$ 5,194,389	\$ 1,951,520	27.3%	\$ 7,204,632

Per Ton Disposal Fees	FY 15 Budget	YTD Average Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Difference	FY 16 Proposed Budget
Member Disposal Fee	\$ 28.750	\$ 28.754	\$ (0.004)	-0.01%	\$ 28.750
Cost of Service (COS) Tipping Fee	\$ 28.750	\$ 29.295	\$ (0.545)	-1.89%	\$ 28.793
Avg. Rate-Lynchburg Contracts & Other Waste	\$ 36.000	\$ 35.993	\$ 0.007	0.02%	\$ 38.000
Market Rate	\$ 38.750	\$ 38.751	\$ (0.001)	0.00%	\$ 38.750

**Region 2000 Services Authority
FY 2015 Expenses - through 3/31/2015
SUMMARY - Schedule 2**

FY2016 Contract Rate is \$38/Other rates \$28.75/\$38.75

Expenses	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
Personnel (Schedule 3)	\$ 1,341,924	\$ 973,770	\$ 368,154	27.4%	\$ 1,382,078	2.99%
Landfill O & M (Schedule 4) (1)	\$ 1,544,300	\$ 1,085,241	\$ 459,059	29.7%	\$ 1,598,800	3.53%
Landfill Equipment Replacement Reserve	\$ 400,000	\$ 300,000	\$ 100,000	25.0%	\$ 408,000	2.00%
Closure and Post-Closure Reserve	\$ 790,252	\$ 592,689	\$ 197,563	25.0%	\$ 704,905	-10.80%
Environmental Remediation	\$ 50,000	\$ 37,500	\$ 12,500	25.0%	\$ 50,000	0.00%
O & M Reserve	\$ -	\$ -	\$ -	0.0%	\$ -	#DIV/0!
Annual Debt Service Subtotal	\$ 2,101,850	\$ 1,576,355	\$ 525,495	25.0%	\$ 2,084,499	-0.83%
Operating Expenses	\$ 6,228,326	\$ 4,565,555	\$ 1,662,771	26.7%	\$ 6,228,282	0.00%
Reimbursable Personnel Costs (Schedule 5)	\$ (107,163)	\$ (60,964)	\$ (46,199)	43.1%	\$ (107,163)	0.00%
Reimbursable O & M Costs (Schedule 5)	\$ (196,400)	\$ (108,709)	\$ (87,691)	44.6%	\$ (196,400)	0.00%
Late Fee, Recycling & Int Income	\$ (21,000)	\$ (9,432)	\$ (11,568)	55.1%	\$ (21,000)	0.00%
Net Cost of Service Operating Expense Total	\$ 5,903,763	\$ 4,386,450	\$ 1,517,313	25.7%	\$ 5,903,719	0.00%

Net Cost of Service Operating Expense Total \$ 5,903,763 \$ 4,386,450 \$ 1,517,313 25.7% \$ 5,903,719 0.00%

Airspace Reserve	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
Lynchburg (Split is 30.6%)	\$ 380,102	\$ 256,464	\$ 123,638	33%	\$ 396,327	4.27%
Campbell (Split is 69.4%)	\$ 862,061	\$ 581,653	\$ 280,408	33%	\$ 898,860	4.27%
Airspace Reserve Subtotal	\$ 1,242,163	\$ 838,117	\$ 404,046	33%	\$ 1,295,187	4.27%
O & M Reserve Contribution	\$ (18)	\$ (30,179)	\$ 30,161		\$ (3,166)	
Total Expenses	\$ 7,145,909	\$ 5,194,389	\$ 1,951,520	27%	\$ 7,204,632	0.82%

Total Expenses \$ 7,145,909 \$ 5,194,389 \$ 1,951,520 27% \$ 7,204,632 0.82%

Total Revenue Generating Tonnage	205,346	149,735	55,612	27.1%	205,346	0.00%
Disposal Cost per Ton	\$ 28.7503	\$ 29.295	\$ (0.545)	-1.9%	\$ 28.7500	0.00%

(1) Diesel fuel expenditure line item increased to budget to establish possible fuel reserve.

**Personnel
Schedule 3**

	Account	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
	Solid Waste Staff						
	Management	\$ 257,946	\$ 193,459	\$ 64,486	25.0%	\$ 257,945	0.00%
	Operations	\$ 576,385	\$ 427,710	\$ 148,675	25.8%	\$ 591,164	2.56%
41100	Salaries&Wages-Est Salary Study suggested inc	\$ 15,000	\$ -	\$ 15,000	100.0%	\$ -	-100.00%
	Proposed FY2016 -2% Salary Increase					\$ 16,982	#DIV/0!
	Proposed FY2016 -Merit Increase					\$ 12,100	#DIV/0!
	Total Salaries	\$ 849,330	\$ 621,169	\$ 228,161	26.9%	\$ 878,191	3.40%
	Employee Benefits						
42210	VRS-Retirement (7.52% ER + VLDP)	\$ 63,870	\$ 46,762	\$ 17,108	27%	\$ 66,211	3.67%
42220	VRS Life Insurance (1.19%)	\$ 11,211	\$ 7,392	\$ 3,819	34%	\$ 10,450	-6.79%
42300	Employer Cost-Health Insurance (FY16 2% Inc)	\$ 136,984	\$ 98,704	\$ 38,280	28%	\$ 139,455	1.80%
42700	Employer Cost-Worker's Comp	\$ 28,000	\$ 29,056	\$ (1,056)	-4%	\$ 30,000	7.14%
42100	Employer Cost-FICA	\$ 66,733	\$ 46,968	\$ 19,765	30%	\$ 68,941	3.31%
47000	Retiree Health Care-OPEB-GASB 45	\$ -	\$ -	\$ -	0%	\$ -	
42500	Disability Insurance	\$ -	\$ -	\$ -	0%	\$ -	0.00%
42600	Unemployment Insurance	\$ 8,000	\$ -	\$ 8,000	100%	\$ 8,000	0.00%
	Employee Benefits Subtotal	\$ 314,798	\$ 228,881	\$ 85,917	27.3%	\$ 323,057	2.62%
	Overtime						
41200	Salaries and Wages - Overtime	\$ 23,000	\$ 17,371	\$ 5,629	24%	\$ 23,000	0.00%
41300	Part -time Salaries-Wages-Regul	\$ -	\$ -	\$ -	0%	\$ -	
41400	Part -time Salaries-Wages-Overt	\$ -	\$ -	\$ -	0%	\$ -	
	Overtime Subtotal	\$ 23,000	\$ 17,371	\$ 5,629	24%	\$ 23,000	0.00%
	Total Personnel Costs-Services Authority Staff	\$ 1,187,129	\$ 867,422	\$ 319,707	26.9%	\$ 1,224,249	3.13%
	Local Government Council Staff						
	Total Personnel Costs-Region 2000 Staff	\$ 154,796	\$ 106,349	\$ 48,447	31.3%	\$ 157,829	1.96%
	Total Personnel Costs	\$ 1,341,924	\$ 973,770	\$ 368,154	27.4%	\$ 1,382,078	2.99%

2% Proposed Salary Increase \$ 16,982
 FICA \$ 1,299
 VRS Ret \$ 1,277
 VRS Life \$ 202
\$ 19,760 \$ 0.09623 Per Ton

Proposed Merit Increase \$ 12,100
 FICA \$ 926
 VRS Ret \$ 910
 VRS Life \$ 144
\$ 14,079 \$ 0.06856 Per Ton

**Landfill Operating and Maintenance Expenses
Schedule 4**

Account	Operations and Maintenance Cost Type	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
	Contractual Services						
43166	Software support-Paradigm	\$ 10,000	\$ 6,271	\$ 3,729	37%	\$ 10,000	0.00%
43321	Communications M&R Service/Radio	\$ 8,000	\$ 12,555	\$ (4,555)	-57%	\$ 13,000	62.50%
43313	Building M & R Services	\$ 2,000	\$ 1,693	\$ 307	15%	\$ 2,000	0.00%
43171	Site Maintenance-Lynchburg	\$ 5,000	\$ 931	\$ 4,069	81%	\$ 5,000	0.00%
43172	Site Maintenance-Campbell	\$ 10,000	\$ 26,141	\$ (16,141)	-161%	\$ 35,000	250.00%
43170	Sedimentation Basin Cleaning	\$ -	\$ -	\$ -	0%	\$ -	0.00%
43169	Janitorial Services	\$ 7,800	\$ 5,584	\$ 2,216	28%	\$ 7,800	0.00%
43110	Med/Dental/Pharm/Lab Services	\$ -	\$ -	\$ -	0%	\$ -	0.00%
43150	Legal Services	\$ 30,000	\$ 30,388	\$ (388)	-1%	\$ 30,000	0.00%
43120	Accounting and auditing service	\$ 7,000	\$ 7,200	\$ (200)	-3%	\$ 8,000	14.29%
43140	Engineering/Monitoring Services-Lynchburg	\$ 35,000	\$ 15,049	\$ 19,951	57%	\$ 35,000	0.00%
43140a	Engineering/Monitoring Services-Campbell	\$ 65,000	\$ 88,920	\$ (23,920)	-37%	\$ 75,000	15.38%
43141	Professional Consulting Service	\$ -	\$ -	\$ -	0%	\$ -	0.00%
43160	Environmental Lab Services-Lynchburg	\$ 15,000	\$ 2,936	\$ 12,064	80%	\$ 15,000	0.00%
43160a	Environmental Lab Services-Campbell	\$ 15,000	\$ 6,179	\$ 8,821	59%	\$ 15,000	0.00%
43200	Temporary Help Service Fees	\$ 20,000	\$ 12,457	\$ 7,543	38%	\$ 20,000	0.00%
43600	Advertising	\$ 10,000	\$ 2,259	\$ 7,741	77%	\$ 10,000	0.00%
43176	Software Purchases-Other	\$ 5,000	\$ 3,100	\$ 1,900	38%	\$ 5,000	0.00%
43167	Pest Control services	\$ 1,200	\$ 640	\$ 560	47%	\$ 1,200	0.00%
43168	Investigative Services	\$ 100	\$ 135	\$ (35)	-35%	\$ 100	0.00%
46011	Uniform Rental Services	\$ 12,000	\$ 9,919	\$ 2,081	17%	\$ 13,000	8.33%
43161	Tire Shredding Services	\$ 5,000	\$ 2,440	\$ 2,560	51%	\$ 5,000	0.00%
43165	Misc Contractual Services	\$ 1,000	\$ 3,410	\$ (2,410)	-241%	\$ 1,000	0.00%
43177	Creation and Maintenance of a web site	\$ 5,000	\$ 842	\$ 4,158	83%	\$ 5,000	0.00%
42850	Employee Med Exp-drug tests, ph	\$ 2,000	\$ 880	\$ 1,120	56%	\$ 2,000	0.00%
46031	Heavy Equipment-Outside Repair	\$ 50,000	\$ 35,295	\$ 14,705	29%	\$ 50,000	0.00%
43173	Mechanical M&R Services	\$ 5,000	\$ 1,465	\$ 3,535	71%	\$ 5,000	0.00%
43175	Software support-City of Lynchb	\$ -	\$ -	\$ -	0%	\$ -	0.00%
43121	Payroll support services	\$ 12,000	\$ 5,000	\$ 7,000	58%	\$ 12,000	0.00%
46017	Software Maint Contract-Accounting	\$ 800	\$ -	\$ 800	100%	\$ 800	0.00%
43162	HHW Disposal	\$ -	\$ 91	\$ (91)	0%	\$ -	0.00%
43163	Wood Waste Grinding	\$ 10,000	\$ -	\$ 10,000	100%	\$ 10,000	0.00%
	Contractual Services Subtotal	\$ 348,900	\$ 281,780	\$ 67,120	19%	\$ 390,900	12.04%
	Supplies & Materials						
46001	Office Supplies/Audio Visual Supplies	\$ 8,400	\$ 2,746	\$ 5,654	67%	\$ 8,400	0.00%
46002	Forms & Stationary	\$ 1,500	\$ 205	\$ 1,295	86%	\$ 2,000	33.33%
46005	Custodial Supplies	\$ 4,000	\$ 1,295	\$ 2,705	68%	\$ 4,000	0.00%
46033	Apparel/Protective Wear/Personal Protective Equipment	\$ 5,000	\$ 1,965	\$ 3,035	61%	\$ 5,000	0.00%
46012	Books & Publications	\$ -	\$ -	\$ -	0%	\$ -	0.00%
46013	Subscriptions	\$ 1,000	\$ -	\$ 1,000	100%	\$ 1,000	0.00%
46018	Safety Supplies	\$ 5,000	\$ 1,977	\$ 3,023	60%	\$ 5,000	0.00%
46019	Awards & Recognitions	\$ 1,500	\$ -	\$ 1,500	100%	\$ 1,500	0.00%
46020	Grounds Maintenance Supplies	\$ 20,000	\$ 1,718	\$ 18,282	91%	\$ 20,000	0.00%
46026	Food & Dietary Supplies	\$ 1,000	\$ 603	\$ 397	40%	\$ 1,000	0.00%
46022	Minor Equipment-Tools	\$ 5,000	\$ 4,533	\$ 467	9%	\$ 7,000	40.00%
46021	Chemicals/gases	\$ 1,000	\$ 65	\$ 935	93%	\$ 1,000	0.00%
43310	R & M- Office	\$ -	\$ -	\$ -	0%	\$ -	0.00%
46009	Vehicle M&R Equipment Parts	\$ 150,000	\$ 101,226	\$ 48,774	33%	\$ 150,000	0.00%
46007	R&M Supplies-Building	\$ 5,000	\$ 313	\$ 4,687	94%	\$ 5,000	0.00%
43312	R & M-Mechanical-Materials	\$ 1,000	\$ -	\$ 1,000	100%	\$ 1,000	0.00%
46032	Communications M & R Materials	\$ 2,500	\$ -	\$ 2,500	100%	\$ 2,500	0.00%
46025	Haul Road M&R Materials	\$ 110,000	\$ 82,733	\$ 27,267	25%	\$ 110,000	0.00%
46027	Daily Cover/Posi-Shell	\$ 110,000	\$ 86,712	\$ 23,288	21%	\$ 110,000	0.00%
46034	Side Slope Soil Cover-Concord Turnpike	\$ -	\$ -	\$ -	0%	\$ -	0.00%
45210	Postal Services	\$ 2,000	\$ 902	\$ 1,098	55%	\$ 2,000	0.00%
45220	Messenger Services	\$ 200	\$ 493	\$ (293)	-147%	\$ 200	0.00%
43500	Printing & Binding	\$ 1,000	\$ 513	\$ 487	49%	\$ 1,000	0.00%
46035	Shop Supplies	\$ 5,000	\$ 11,063	\$ (6,063)	-121%	\$ 10,000	100.00%
42820	Education-Tuition Assistance	\$ 5,000	\$ -	\$ 5,000	100%	\$ 5,000	0.00%
46023	Computer Materials & Repair	\$ 13,000	\$ 9,479	\$ 3,521	27%	\$ 13,000	0.00%
46024	Mechanical M&R Materials	\$ -	\$ -	\$ -	0%	\$ -	0.00%
	Supplies & Materials Subtotal	\$ 458,100	\$ 308,542	\$ 149,558	33%	\$ 465,600	1.64%

**Landfill Operating and Maintenance Expenses
Schedule 4**

Attachment No. 3

Account	Operations and Maintenance Cost Type	FY 15 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
	Gas/Diesel Fuel/Oil & Grease	\$ 350,000		\$ 350,000		\$ 350,000	
46008	Vehicle & Equipt Fuel-Diesel	\$ -	\$ 242,677	\$ (242,677)	0%	\$ -	
46028	Vehicle & Equipt Fuel-Gasoline	\$ -	\$ 5,218	\$ (5,218)	0%	\$ -	
46029	Vehicle & Equipt/Oil & Grease	\$ -	\$ 14,433	\$ (14,433)	0%	\$ -	
	Gas/Diesel Fuel/Oil & Grease Subtotal	\$ 350,000	\$ 262,329	\$ 87,671	25%	\$ 350,000	0.00%
	Rentals & Leases						
45410	Lease/Rent of Equipment-Office (Copier/postal meter)	\$ 7,000	\$ 3,737	\$ 3,263	47%	\$ 7,000	0.00%
45411	Lease/Rent of Equipment-Landfill	\$ 5,000	\$ 2,370	\$ 2,630	53%	\$ 5,000	0.00%
45420	Lease/Rent of Buildings	\$ -	\$ 450	\$ (450)	0%	\$ -	#DIV/0!
	Rentals & Leases Subtotal	\$ 12,000	\$ 6,557	\$ 5,443	45%	\$ 12,000	0.00%
	Utilities & Natural Gas						
45230	Telephone/Internet	\$ 18,000	\$ 13,953	\$ 4,047	22%	\$ 18,000	0.00%
45110	Electrical Services	\$ 15,000	\$ 13,440	\$ 1,560	10%	\$ 20,000	33.33%
45130	Water & Sewer	\$ 6,000	\$ 2,976	\$ 3,024	50%	\$ 6,000	0.00%
45120	Utilities - Propane Gas	\$ -	\$ -	\$ -	0%	\$ -	0.00%
45231	Cellular Services & Pager	\$ 2,000	\$ 1,170	\$ 830	42%	\$ 2,000	0.00%
45121	Utilities - Natural Gas	\$ -	\$ -	\$ -	0%	\$ -	0.00%
	Utilities & Natural Gas Subtotal	\$ 41,000	\$ 31,539	\$ 9,461	23%	\$ 46,000	12.20%
	Travel & Training						
45500	Travel & Training	\$ 5,000	\$ -	\$ 5,000	100%	\$ 5,000	0.00%
45510	Travel Mileage-Personal Vehicle	\$ -	\$ 329	\$ (329)	0%	\$ -	
45520	Travel-Public Carriers	\$ -	\$ -	\$ -	0%	\$ -	
45530	Travel-Subsistence & Lodging	\$ -	\$ 1,237	\$ (1,237)	0%	\$ -	
45540	Travel-Convention & Education	\$ -	\$ 539	\$ (539)	0%	\$ -	
46014	On-Site Training	\$ 5,000	\$ 890	\$ 4,110	82%	\$ 5,000	0.00%
	Travel & Training Subtotal	\$ 10,000	\$ 2,995	\$ 7,005	70%	\$ 10,000	0.00%
	Miscellaneous						
45800	Miscellaneous	\$ 3,500	\$ 3,404	\$ 96	3%	\$ 3,500	0.00%
45810	Dues and Assoc Membership-Misc	\$ 1,800	\$ 1,894	\$ (94)	-5%	\$ 1,800	0.00%
45801	Bank Service Charges	\$ 3,600	\$ 1,944	\$ 1,656	46%	\$ 3,600	0.00%
45802	Cash Overage and Shortage	\$ -	\$ 4	\$ (4)	0%	\$ -	0.00%
45803	Finance Charges paid to vendors	\$ -	\$ 3	\$ (3)	0%	\$ -	0.00%
45804	Bad Debt Expense	\$ 3,000	\$ -	\$ 3,000	100%	\$ 3,000	0.00%
46030	Fleet Services Internal Charges-Mgt	\$ -	\$ -	\$ -	0%	\$ -	0.00%
45840	VDEQ landfill fee - Misc	\$ 38,000	\$ 25,476	\$ 12,524	33%	\$ 38,000	0.00%
	Misc Expenses Subtotal	\$ 49,900	\$ 32,725	\$ 17,175	34%	\$ 49,900	0.00%
	Payments to Other Entities						
43164	Leachate Treatment-Concord Turnpike	\$ 13,000	\$ 297	\$ 12,703	98%	\$ 13,000	0.00%
43164a	Leachate Treatment-Campbell	\$ 15,000	\$ -	\$ 15,000	100%	\$ 15,000	0.00%
	Insurance	\$ -	\$ -	\$ -	0%	\$ -	
45308	General Liability insurance	\$ 50,000	\$ 49,768	\$ 232	0%	\$ 50,000	0.00%
	Payments to Other Entities Subtotal	\$ 78,000	\$ 50,065	\$ 27,935	36%	\$ 78,000	0.00%
	Sub-Total SA O & M Expenses	\$ 1,347,900	\$ 976,532	\$ 371,368	28%	\$ 1,402,400	4.04%
	Reimbursable O & M Expenses (see Reimbursable Schedule for Detail)	\$ 196,400	\$ 108,709	\$ 87,691	45%	\$ 196,400	0.00%
	Grand Total Operations and Maintenance Cost	\$ 1,544,300	\$ 1,085,241	\$ 459,059	30%	\$ 1,598,800	3.53%

Account	Operations and Maintenance Cost Type	FY 14 Budget	Actuals Through 3/31/2015	Diff Between Budget & Actual-FY 15	% Budget Remaining-FY 15	FY 16 Proposed Budget	% Change FY15 to FY16 Budget
Reimbursable Landfill O & M Expenses							
City of Lynchburg							
43140	Engineering/Monitoring Services	\$ 55,000	\$ 65,413	\$ (10,413)	-18.9%	\$ 55,000	0.00%
43160	Environmental Lab Services	\$ 15,400	\$ 1,757	\$ 13,643	88.6%	\$ 15,400	0.00%
43161	Tire shredding	\$ -	\$ -	\$ -	0.0%	\$ -	0.00%
43162	HHW Disposal	\$ 27,500	\$ 17,648	\$ 9,852	35.8%	\$ 27,500	0.00%
43163	Wood Waste Grinding	\$ 40,000	\$ -	\$ 40,000	100.0%	\$ 40,000	0.00%
43164	Leachate Treatment	\$ -	\$ -	\$ -	0.0%	\$ -	0.00%
City of Lynchburg Subtotal		\$ 137,900	\$ 84,817	\$ 53,083	38.5%	\$ 137,900	0.00%
Amherst County							
43162	HHW Disposal	\$ -	\$ 4,301	\$ (4,301)	0.0%	\$ -	0.00%
Nelson County							
43162	HHW Disposal	\$ -	\$ 274	\$ (274)	0.0%	\$ -	0.00%
Appomattox County							
43162	HHW Disposal	\$ -	\$ -	\$ -	0.0%	\$ -	0.00%
Campbell County							
43140a	Engineering/Monitoring/Remediation Services	\$ 22,000	\$ 14,392	\$ 7,608	34.6%	\$ 22,000	0.00%
43160a	Environmental Lab Services	\$ 11,000	\$ 2,090	\$ 8,910	81.0%	\$ 11,000	0.00%
43161	Tire shredding	\$ -	\$ -	\$ -	0.0%	\$ -	0.00%
43162	HHW Disposal	\$ 5,500	\$ 2,835	\$ 2,665	48.5%	\$ 5,500	0.00%
43163	Wood Waste Grinding	\$ 15,000	\$ -	\$ 15,000	100.0%	\$ 15,000	0.00%
43164a	Leachate Treatment	\$ 5,000	\$ -	\$ 5,000	100.0%	\$ 5,000	0.00%
Campbell County Subtotal		\$ 58,500	\$ 19,317	\$ 39,183	67.0%	\$ 58,500	0.00%
Reimbursable Landfill O & M Expenses		\$ 196,400	\$ 108,709	\$ 87,691	44.6%	\$ 196,400	0.00%
Reimbursable Landfill Personnel Costs							
City of Lynchburg							
Concord Turnpike Personnel Costs		\$ 32,843	\$ 21,486	\$ 11,357	34.6%	\$ 32,843	0.00%
Recycling Program Manager Salary & Benefits		\$ 27,160	\$ 19,739	\$ 7,421	27.3%	\$ 27,160	0.00%
City of Lynchburg Subtotal		\$ 60,003	\$ 41,225	\$ 18,778	31.3%	\$ 60,003	0.00%
Campbell County							
Environmental Compliance & Safety		\$ 20,000	\$ -	\$ 20,000	100.0%	\$ 20,000	0.00%
Recycling Program Manager Salary & Benefits		\$ 27,160	\$ 19,739	\$ 7,421	27.3%	\$ 27,160	0.00%
Campbell County Subtotal		\$ 47,160	\$ 19,739	\$ 27,421	58.1%	\$ 47,160	0.00%
Reimbursable Landfill Personnel Costs		\$ 107,163	\$ 60,964	\$ 46,199	43.1%	\$ 107,163	0.00%

Region 2000 Services Authority Balance Sheet

Assets	3/31/2015		
Cash - 2011 Bond Funds			
Cash-US Bank-Bond Balance	\$	-	
Cash-US Bank-Bond Fund Payments	\$	1,233,831.39	
Total 2011 Bond Funds	\$	1,233,831.39	
Cash - Closure/Post-Closure			
Cash -SunTrust Closure/Post-Closure	\$	2,445,928.21	100.0%
Total Lynchburg Contribution C/PC Concord Tpk	\$	2,445,928.21	
LGIP-Concord Tpk - SA Contribution C/PC	\$	2,611,079.82	
Total Closure/PC - Concord Tpk	\$	5,057,008.03	
LGIP-Livestock Road - Purchased Contribution C/PC	\$	408,567.42	
LGIP-Livestock Road - SA Contribution C/PC thru FY14	\$	1,482,787.01	
Total Closure/PC - Livestock Rd	\$	1,891,354.43	
Total Closure/Post Closure	\$	6,948,362.46	
Cash-SunTrust Operating Account			
SunTrust Operating Account-Unrestricted	\$	(252,590.51)	-8.0%
City of Lynchburg Asset Reduction Payment Amount	\$	156,171.80	5.0%
Excess Revenue (FY2015)	\$	838,117.00	26.7%
Environmental Rem Reserve Cash (FY2015)	\$	37,500.00	1.2%
Equip Replace Reserve Cash (Since inception)	\$	461,340.31	14.7%
Close/Post-Close Res Cur Year Cash (1Q, 2Q & 3Q FY15)	\$	592,689.00	18.9%
Debt Service Reserve Cash (FY2013)	\$	67,000.00	2.1%
O & M Reserve Cash (FY2012 + FY2013 + FY2014 + FY2015)	\$	1,240,115.00	39.5%
Total SunTrust Operating Account	\$	3,140,342.60	100.0%
LGIP-Environmental Remediation & Future Planning Reserves - FY2009 thru FY2014	\$	453,047.37	
Total Cash and CDs & LGIP	\$	11,775,583.82	
All Receivables for Operations	\$	677,110.36	
Receivable from City for True-up	\$	2,315,238.79	
Internal Loan Receivable	\$	2,188,177.99	
Prepaid Expenses	\$	-	
All Fixed Assets in service-less depreciation	\$	12,820,376.64	
Construction in Progress - LR projects	\$	443,726.41	
Total Assets	\$	30,220,214.01	
Liabilities			
Accounts Payable	\$	275,850.99	
Accrued OPEB Liabilities	\$	202,669.08	
Accrued Interest Payable	\$	168,887.71	
Accrued Vacation Pay	\$	95,453.10	
Total Current Liabilities	\$	742,860.88	
Accrued Closure-P/C Cost-Concord Tpk - City of Lynchburg	\$	4,778,064.35	
Accrued Closure-P/C Cost-Concord Tpk - SA	\$	2,313,845.45	
Accrued Closure-P/C Cost-Livestock Road	\$	4,949,676.89	
Total Closure/Post-Closure	\$	12,041,586.69	
Debt			
Internal Loan Payable	\$	2,188,177.99	
2011 Bond Payable	\$	8,072,000.00	
Total Liabilities	\$	23,044,625.56	
Reserves			
Restricted - Debt Service Reserve	\$	67,000.00	
Restricted - Environmental Remediation Reserve	\$	300,000.00	
Restricted - Equipment Replacement Reserve	\$	384,571.99	
Restricted - Future Disposal Planning Reserve	\$	132,726.60	
Restricted - O & M Reserve	\$	1,270,294.00	
Total Reserves	\$	2,154,592.59	
Fund Balance		\$5,020,995.86	
Total Liabilities & Equity	\$	30,220,214.01	

Region 2000 Services Authority

3/31/2015

Schedule 7

Capital Equipment Fund

FY16 Capital Equipment Items

	Average Cost Estimate	Fund Balance
Estimated Balance @ 6/30/2015		\$ 561,340
Transfer from Operating Fund for FY2016		\$ 408,000
Used Street Sweeper	\$ 50,000	
Used Mini-excavator	\$ 50,000	
Two hand-held radios	\$ 3,000	
Pump Station Actuator Valve	\$ 50,000	
Computer Server System	\$ 9,200	
Subtotal	\$ 162,200	
Estimated Balance @ 6/30/2016		\$ 807,140

Other Capital Items

FY16 Other Capital Items

	Average Cost Estimate
Lateral Expansion at Livestock Road Landfill (future borrowing)	\$ 9,000,000

**LANDFILL GAS PUMP TEST PILOT STUDY
REGION 2000 REGIONAL LANDFILL
LIVESTOCK ROAD FACILITY
WORK ORDER**

1. SCOPE OF SERVICES TO BE PERFORMED:

This scope of services outlines the tasks identified by SCS Engineers (SCS) necessary to perform landfill gas (LFG) pump test activities as part of a pilot study to evaluate odor control technologies at the Region 2000 Regional Landfill – Livestock Road Facility (Facility) in Rustburg, Virginia. The proposed scope of services is divided into planning, design, coordination, and procurement (Task 1), LFG pump test construction and trailer setup (Task 2), and blower rental/OM&M (Task 3). The pump test is proposed to extract LFG from four existing leachate cleanouts in Phase III and is expected to assist the Authority in reducing malodorous fugitive LFG emissions at the Facility. This Work Order outlines the protocols and procedures to be utilized during this pump test pilot study.

TASK 1 – COORDINATION AND PROCUREMENT

SCS understands that odors have been detected and reported in the general vicinity of the Landfill. SCS understands the Facility suspects the sources of the odors are likely related to both working face operations and landfill gas (LFG) fugitive emissions; however, the description of the odors from Facility personnel and the surrounding community needs to be better documented as part of a broader odor investigation that SCS has proposed under a separate Work Order.

The Authority has requested that SCS mobilize a portable LFG blower station to the Facility and apply vacuum to four leachate cleanouts in order to extract LFG from the leachate collection system at the bottom of the waste disposal cells in Phase III and treat the collected LFG using activated carbon to remove malodorous compounds. Task 1 involves planning, design, coordination and procurement to address the planning and logistics of the pump test setup, design of the infrastructure necessary to collect and convey the LFG, and preparation of the LFG mobile pump test station for LFG treatment. This task includes coordination with the Authority to locate the piping layout, select the pump test trailer location, and coordinate power needs of the blower.

SCS will conduct at least one site reconnaissance with the Authority to investigate the leachate cleanouts for LFG quantity and quality, review options for the pump test trailer location with the Authority, and inventory necessary pipe fittings, as well as conduct measurements for procurement of LFG pipe. SCS will prepare conceptual design documents that depict the piping configuration and alignment, layout for the LFG pump test blower and connections, as well as present the design for a condensate knockout for liquids management.

Upon design of the pump test layout, SCS will prepare a cost estimate of for the infrastructure to be installed in conjunction with the project and submit it to the Authority. Upon receiving authorization from the Authority, SCS will procure the necessary materials required to setup and operate the pump test and communicate with the Authority via phone and/or conference calls and e-mail.

Prior to mobilizing the LFG pump test trailer to the site, we will arrange to deliver it to Electrical & Mechanical Resources, Inc. (EMR) in Richmond, VA to undergo testing and affix a new active carbon canister to the trailer with cam lock fittings. SCS will meet with EMR to verify the trailer is in peak working condition.

TASK 2 – LFG PUMP TEST AND TRAILER SETUP

SCS is prepared to mobilize the LFG mobile blower station to the Facility upon arrival of the piping shipment and completion of pump test trailer diagnostic testing and upgrades at EMR. Task 2 addresses installation of the wellhead connections and piping as well as coordination with the Authority's electrician to provide power to the blower and electronics (datalogger and flowmeter). We have assumed the Authority will assist SCS by performing excavation activities and moving LFG header pipe during pipe welding activities. SCS will perform the following activities:

- provide equipment to weld approximately 1,500 feet of 4-inch diameter HDPE LFG header and 600 feet of 10-inch diameter HDPE;
- install wellheads on four leachate cleanouts;
- install pipe fittings where appropriate;
- install a condensate manhole per design; and,
- configure and connect the four leachate cleanouts to the LFG mobile blower station.

SCS will coordinate with our subcontractor to perform horizontal directional drilling under the access road and install a 10-inch LFG header, which we anticipate will be suitable to serve the future LFG Collection System. The 10-inch LFG header will run to the condensate manhole per the LFG pump test design layout.

Upon the connection of the wellheads, LFG collection header piping and the setup of the trailer, SCS will activate the LFG mobile blower station. SCS will check electrical equipment, reset the flowmeter, and check for leaks in the piping assembly on the trailer. SCS will regulate vacuum at the blower station and balance the vacuum applied to the leachate cleanouts.

SCS will measure LFG quality using a GEM-2000 gas analyzer at the blower station and the four leachate cleanouts. SCS will collect one tedlar bag sample to be analyzed for TRS and VOCs. The samples obtained for TRS compounds and VOCs will be sent to ATMAA for

analysis by GC/MS and TO-15, respectively. The detection limits for the TRS should be in the range of 50 ppb. The detection limits for the VOCs should be in the range of 1 ppb.

TASK 3 – OM&M AND TRAILER RENTAL

SCS will perform Operations, Maintenance, and Monitoring (OM&M) of the LFG mobile blower unit and leachate cleanout connections at the Facility on a monthly basis. Our budgetary fee estimate for this task includes two monthly OM&M events for May and June which coincides with the remainder of the Authority's fiscal year FY 2014-15. The rental fee for the LFG mobile blower station will be charged on a monthly basis and the fee for these two months is included in this task.

The OM&M will include servicing the LFG mobile blower station, inspecting and pumping the condensate manhole and knockout as needed, recording LFG quality measurements at all leachate cleanouts, as well as balancing the four leachate cleanouts that are connected to the LFG mobile blower station. It should be noted that, assuming the pilot study is deemed successful, OM&M and trailer rental will be ongoing in the Authority's fiscal year FY2015-16 and a separate work order will be developed for approval, accordingly.

2. WORK ORDER SCHEDULE:

SCS has coordinated with the Authority to commence certain design and planning activities under Task 1. SCS is prepared to mobilize the LFG mobile blower station and perform Task 2 immediately upon shipment of LFG pipe and fittings to the Facility. SCS will perform Task 3 activities on a monthly basis subsequent to setup of the LFG pump test beginning in May 2015.

3. COMPENSATION:

SCS will be compensated for time and expenses in accordance with SCS' standard rates in effect at the time of performance, provided that total compensation will not exceed \$52,500 without the Client's authorization.

- | | |
|--|------------------|
| • Task 1 – Coordination and Procurement | \$ 10,700 budget |
| • Task 2 – LFG Pump Test and Trailer Setup | \$ 35,800 budget |
| • Task 3 – Blower Rental/OM&M | \$ 6,000 budget |

Total Amount of this Work Order = **\$52,500**

Any work added to the Scope of Services to be performed shall be compensated at SCS' standard fee schedule in effect at the time of performance. Attachment A provides a breakdown for completion of the activities described above.

ATTACHMENT A
BUDGETARY FEE ESTIMATE FOR LFG PUMP TEST PILOT STUDY
LIVESTOCK ROAD REGIONAL LANDFILL

SCS ENGINEERS LABOR CATEGORY	Rate \$/hr	TASK 1 COORDINATION & PROCUREMENT		TASK 2 LFG PUMP TEST CONSTRUCTION AND TRAILER SETUP		TASK 3 BLOWER RENTAL & OM&M		TOTAL	
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Project Director	\$ 190	8	\$ 1,520	4	\$ 760	2	\$ 380	14	\$ 2,660
Project Coordinator	\$ 105	2	\$ 210	2	\$ 210	2	\$ 210	6	\$ 630
Project Professional	\$ 100	48	\$ 4,800	32	\$ 3,200	4	\$ 400	84	\$ 8,400
Project Superintendent	\$ 100	6	\$ 600		\$ -		\$ -	6	\$ 600
Sr. LFG Technician	\$ 80	17	\$ 1,360	51	\$ 4,080	17	\$ 1,360	85	\$ 6,800
TOTAL LABOR		81	\$ 8,490	89	\$ 8,250	25	\$ 2,350	195	\$ 19,090
OTHER DIRECT COSTS									
Auto/Maint/Mileage			\$ 250		\$ 530		\$ 495		\$ 1,275
Laboratory Analysis			\$ -		\$ 600		\$ -		\$ 600
Horizontal Directional Drilling			\$ -		\$ 10,000		\$ -		\$ 10,000
LFG mobile pump test trailer			\$ 1,275		\$ -		\$ 2,000		\$ 3,275
Field Equipment/Fusion Equip.			\$ 250		\$ 1,375		\$ 500		\$ 2,125
Piping, Fittings, and Freight			\$ -		\$ 10,500		\$ -		
Per Diem			\$ -		\$ 650		\$ -		\$ 650
Telephone/Facsimile			\$ 25		\$ 35		\$ 30		\$ 90
Postage/Freight			\$ 25		\$ 200		\$ 45		\$ 271
Reproduction/Printing			\$ 35		\$ 20		\$ 30		\$ 86
Computer			\$ 60		\$ 45		\$ 75		\$ 179
TOTAL ESTIMATED ODC's BY TASK			\$ 1,921		\$ 23,956		\$ 3,174		\$ 29,052
Administrative (15%)			\$ 288		\$ 3,593		\$ 476		\$ 4,358
TOTAL			10,700		35,800		6,000		\$ 52,500

Attachment Item No. 5c

TASK ORDER
Sludge Compost Feasibility Study
To the Agreement Between
Region 2000 Services Authority and Draper Aden Associates
April 14, 2015

THIS TASK ORDER is executed under the terms of the Master Services Agreement for general engineering services, between Virginia's Region 2000 Services Authority (Owner/Authority) and Draper Aden Associates (Engineer) dated July 29, 2013 as signed by the Owner on August 26, 2013 and is incorporated as part of that Agreement.

EFFECTIVE DATE

This Task Order is effective as of the date of Owner's signature.

SCOPE OF SERVICES

Under this task order the following activities would be completed:

Task 1 – Kick-Off Meeting and Data Collection

Under this task, a kick-off meeting will be held including a site visit as well as data collection completed.

Task 2 – Process Design (Coker Composting and Consulting)

This task will focus on the preliminary process design for the facility, which will include:

- Characterization of available yard waste stream with regard to monthly variations in quantities and seasonal changes in composition, based on typical mid-Atlantic Eastern deciduous hardwood ecology.
- Characterization of sludge received at the current Region 2000 Services Authority Livestock Road, Permit 610 facility and additional sludge as may be generated by the City of Lynchburg based on information to be provided by the Authority and City of Lynchburg.
- Development of a mass-based composting recipe for incoming feedstocks, recycled compost inoculant, and both fresh and recovered bulking agent that meets the recommended process design criteria of:
 - A C:N ratio of 25:1 to 30:1
 - Mix moisture content of 50% - 55%
 - Mix volatile solids content greater than 80%
 - Predicted Free Air Space content between 40% and 60%
- Development of a volume-based process flow diagram and sizing of all manufacturing steps in the composting process, based on best management practices assumptions regarding process residence times, equipment access areas, and safety zone considerations.
- Determining footprint areal requirements for
 - open-air turned windrow composting
 - positive aeration static pile composting under pavilion roof (open walls) with in-situ biocovers for odor control
 - positive aeration static pile composting in enclosed building with biofiltration for odor control

Task 3 – Siting Evaluation (Draper Aden Associates)

Based on the footprint analysis in Task 1, identify areas of the Authority or adjacent County properties adequately sized to accommodate the various processing steps of the three composting alternatives, and that would comply with best management practices and regulatory requirements for setbacks from sensitive environmental features and receptors. Identify site-related development issues that might affect the economic analysis in Task 5. Recommend composting alternatives to be evaluated in Task 5.

Task 4 – Compost Product Market Assessment (Coker Composting and Consulting)

The compost markets to be evaluated in this task will include the traditional markets of landscape and agriculture, and will also include internal Authority usages in alternative daily cover and production of final cover soils as well as external emerging markets in storm water management (growth media for bioswales and bioretention ponds), erosion prevention (compost blankets), sediment control (filter socks), constructed wetlands and environmental remediation sites. This task will identify competing products now in the marketplace in this region (which are relatively few). Potential additional products that could be evaluated could include:

Attachment Item No. 5c

TASK ORDER
Sludge Compost Feasibility Study
To the Agreement Between
Region 2000 Services Authority and Draper Aden Associates
April 14, 2015

- Golf Course Rootzone Mix – 90% washed sand + 10% compost
- Bioswale & Bioretention Pond Soil – 80% washed sand + 20% compost
- Turf Media – 70% sand + 30% compost
- Topsoil – 60% sand + 40% compost
- Manufactured Soil – 50% sand + 50% compost

As some of these products may already be carried by soils wholesalers and retailers in the region, this task should also look at the potential for the Authority to be a supplier to those companies.

Task 5 – Economic Analysis (Coker Composting and Consulting; Burns and McDonnell)

For each of the onsite composting alternatives deemed feasible, prepare cost estimates for site development and facility construction, which, for this early stage of development, can be no more accurate than +50%/-30%. Prepare a proposed equipment plan, identifying types of equipment, candidate sources and likely prices. Prepare an estimated annual operations and maintenance budget for the facility.

Evaluate the economics of composting in the larger context of the Authority's financial planning based on the information generated above. This work will be completed by Burns and McDonnell.

Task 6 – Final Report and Board Presentation (Coker Composting and Consulting; Draper Aden Associates)

Summarize all work performed in a draft report for Authority staff for review and comment. Finalize the report following receipt of comments. Prepare a draft presentation to deliver to the Authority's Board of Directors and submit the presentation to Region 2000 staff for review and comment. Finalize the presentation following receipt of comments. Attend a designated Board meeting and present project findings.

CONSULTANTS

The following consultants are required to complete the work under this task and are included in the fee estimates below:

Coker Composting and Consulting (See resume attached.)
Mr. Craig Coker
2186 Mountain Pass Road
Troutville VA 24175

Burns and McDonnell Engineering Company, Inc.
Mr. Scott Pasternak and Mr. Seth Cunningham
901 Mopac Expressway, Suite 300
Austin Texas 78746

DELIVERABLES AND SCHEDULE

Deliverables are noted above. The project Schedule for this Task Order is outlined below.

Final report will be presented to the Authority at their July 22, 2015 meeting. Draft will be due 30 days prior to the meeting for internal Authority review (June 24, 2015)

OWNER'S RESPONSIBILITIES

Owner shall have those responsibilities set forth in the Master Agreement with additions as follows:

TASK ORDER
Sludge Compost Feasibility Study
To the Agreement Between
Region 2000 Services Authority and Draper Aden Associates
April 14, 2015

Attachment Item No. 5c

- Provision of information on sludge and yard waste quantities as may be necessary.
- Authority will work with City to provide copy of previous Biosolids evaluation report prepared by Brown and Caldwell for the City of Lynchburg.
- Review of the document in a timely fashion.

ASSUMPTIONS

Assumptions for development of this project include the following:

- Only the composting of Biosolids will be considered for this evaluation.
- This evaluation will not be comparative to other potential options available for the handling of Biosolids.
- Site evaluation will rely on GIS mapping information.

COMPENSATION


Engineer shall be compensated for performing the above services as follows. Fee estimates are based on the 2015 hourly rate schedule and will be invoiced as indicated below. We have not broken the fee out by task. Work will be completed on a lump sum basis. Reimbursables including the subconsultants are included in the fee. Subconsultants are marked up as allowed in our Master Service Agreement.

TASK	ESTIMATED FEE	BILLING METHOD
Compost Feasibility Study	\$29,600	Lump sum

Engineer's compensation is based on the payment procedures (Article 2.01B of the Agreement) and the invoicing requirements as established in Article 4 and Exhibit C of the Agreement. Incidental fees will be addressed per Article C.2.03.

IN WITNESS WHEREOF, the parties have signed this Task Agreement.

DRAPER ADEN ASSOCIATES

By (Signature):  _____
 Name Michael D. Lawless, CPG, PG
 Title Principal / Vice President
 Date April 14, 2015

REGION 2000 SERVICES AUTHORITY

By (Signature): _____
 Name Clarke W. Gibson
 Title Director
 Date _____

Draft
Citizen Comment Policy
To be considered April 22, 2015

The Region 2000 Services Authority welcomes public comments and establishes the following policies to incorporate public comments into the regular meetings.

Addition of a Citizen Comment section of the agenda:

The Services Authority shall set aside on the agenda for each regular meeting a citizen comment period of fifteen (15) minutes. Individual citizens shall limit their remarks to three (3) minutes each and to those matters that are within the scope and authority of the Services Authority. The Authority may elect to extend this time period with approval of a majority of its members. Citizens of the member jurisdictions and individuals who own businesses in the member jurisdictions will be allowed to address the Authority.

Citizens are encouraged to contact an appropriate member of the administrative staff or a member of the Services Authority to resolve issues prior to Council meetings. Citizens requesting to address the Services Authority must sign in prior to the beginning of the meeting.

The Chair or other presiding officer shall allocate the time among speakers in an equitable manner and by order of receipt of requests to speak. Each speaker shall be allowed to speak only once. Speakers will address the Council as a whole, not to individual members. The presiding officer shall enforce the observance of order and decorum and the rules of order.

The Chair or presiding officer may refer matters to appropriate Authority staff or members of the Council, or to an appropriate committee for further study. Any ruling by the presiding officer may be appealed to the full Authority in accordance with parliamentary procedures.

When any matter is made the special order for a future meeting, it shall at such a meeting take priority over all other business except the reading of the minutes of the last meeting and the financial report.

Public Hearings

In the event of a scheduled public hearing, the citizen comment period will follow the public hearing and action on the public hearing issues. Comments on matters that are subject to a public hearing will not be allowed during the citizen comment period.

All public hearings will be held in facilities fully accessible to individuals with disabilities. Every reasonable effort will be made to accommodate individuals with disabilities who wish to participate in the public process. When possible the Authority will schedule public hearings and workshops in the late afternoon and early evening so those citizens that work can attend.

The Authority will also receive public hearing comments in writing on any public hearing action that may include but is not limited to: mail in letters and postcards, email, tape recordings, handwritten comments and or voicemail messages when feasible and/or appropriate.

To Region 2000 Services Authority Board
From Davenport & Company LLC
Date April 22, 2015
Subject 2015 Revenue Bond: Phase IV

Background

2008 Borrowing:

In 2008 the Services Authority borrowed \$10.0 million from Carter Bank & Trust.

- Interest Rate: 3.15%
- Final Maturity: October 1, 2015

The funds were used to pay for:

- Purchase of the Lynchburg Landfill.
- Purchase of Equipment from both Lynchburg and Campbell.
- Fund Livestock Road improvements.
- Various Capital Equipment Purchases.
- Engineering and Architectural costs to reopen Campbell.

As of June 30, 2013, the Authority paid off the remaining balance of this borrowing.

2011 Borrowing:

In 2011 the Services Authority borrowed \$10.0 million from Branch Banking & Trust Company (“BB&T”).

- Interest Rate: 4.15%
- Final Maturity: August 1, 2024

The funds were used to pay for:

- Construct Cells 6 & 7 at the Campbell County landfill facility.
- Make site improvements to the Campbell County landfill facility.

2015 Borrowing:

On March 16, 2015, Davenport & Company LLC, (“Davenport”) drafted and distributed a bank Request for Proposal, (“RFP”) for capital funding commitments. The bank RFP was distributed to a number of local, regional and national lenders. Additionally, the Authority’s Working Group began compiling the necessary information for completing a funding application to the Virginia Resources Authority, (“VRA”) in anticipation of the 2015 Summer Pool Financing application deadline on May 1, 2015.

Over the course of the last several weeks, the Working Group has worked to identify the benefits and challenges of securing funding commitments from all available sources. A brief overview of the status of these efforts follows:

DAVENPORT & COMPANY**2015 Revenue Bond: Phase IV**

April 22, 2015

VRA:

On behalf of the Authority, Davenport initiated discussions with VRA to evaluate the 2015 VRA Summer Pool Financing as a potential funding source for its current capital needs. A VRA funding commitment may require the Authority to obtain approvals from the individual Member Jurisdictions for the issuance of debt as well as the approval of related support agreements. Amendments to the Member Use Agreement may also be required.

The application deadline for the 2015 VRA Summer Pool Financing is May 1, 2015.

BB&T Bank:

As a result of the RFP process and discussions with BB&T, we received a formal proposal from BB&T on April 13, 2015 (see attached). A summary of their proposal is as follows:

Amount:	Up to \$9.0 million.
Term:	9 ½ years from loan closing (November 1, 2024 final maturity).
Rate:	2.18% fixed, bank-qualified and tax-exempt.
Prepayment:	<u>Option 1</u> - In whole on a scheduled payment date with a 1% prepayment premium. <u>Option 2</u> - Non-callable for the first half of the term, then callable at par through maturity.
Interest Payments:	Semi-annual interest payments on May 1 and November 1, commencing November 1, 2015.
Principal Payments:	Annual principal payments on November 1, commencing November 1, 2016.
Security:	Lien on system revenues on parity with all prior revenue bonds issued by the Authority.
Timing:	Closing no later than 45 days from the date of the proposal (before the end of May).
Bank Fee:	Not-to-exceed \$7,000 for the reimbursement of bank legal expenses.

DAVENPORT & COMPANY

2015 Revenue Bond: Phase IV

April 22, 2015

Recommendation:

Based upon the options discussed above, Davenport recommends that the Authority Board move forward with BB&T Bank for the placement of its 2015 Bond.

Next Steps:

- April 22nd: Funding options presented to the Authority Board.
 Authority Board considers approval of BB&T Bank for the placement of the 2015 Bond.
 Appropriate action taken to formalize this decision.
- April/May: Bond documents developed, reviewed and finalized by the Working Group.
 Project borrowing amount is finalized with Authority staff and consultants.
 Bond sizing is finalized and incorporated into the Authority's operating pro-forma.
 Additional Authority Board action taken as needed.
- NLT May 29th: Close and fund the 2015 Bond.

DAVENPORT & COMPANY**2015 Revenue Bond: Phase IV**

April 22, 2015

The U.S. Securities and Exchange Commission (the "SEC") has clarified that a broker, dealer or municipal securities dealer engaging in municipal advisory activities outside the scope of underwriting a particular issuance of municipal securities should be subject to municipal advisor registration. Davenport & Company LLC ("Davenport") has registered as a municipal advisor with the SEC. As a registered municipal advisor Davenport may provide advice to a municipal entity or obligated person. An obligated person is an entity other than a municipal entity, such as a not for profit corporation, that has commenced an application or negotiation with an entity to issue municipal securities on its behalf and for which it will provide support. If and when an issuer engages Davenport to provide financial advisory or consultant services with respect to the issuance of municipal securities, Davenport is obligated to evidence such a financial advisory relationship with a written agreement.

When acting as a registered municipal advisor Davenport is a fiduciary required by federal law to act in the best interest of a municipal entity without regard to its own financial or other interests. Davenport is not a fiduciary when it acts as a registered investment advisor, when advising an obligated person, or when acting as an underwriter, though it is required to deal fairly with such persons.

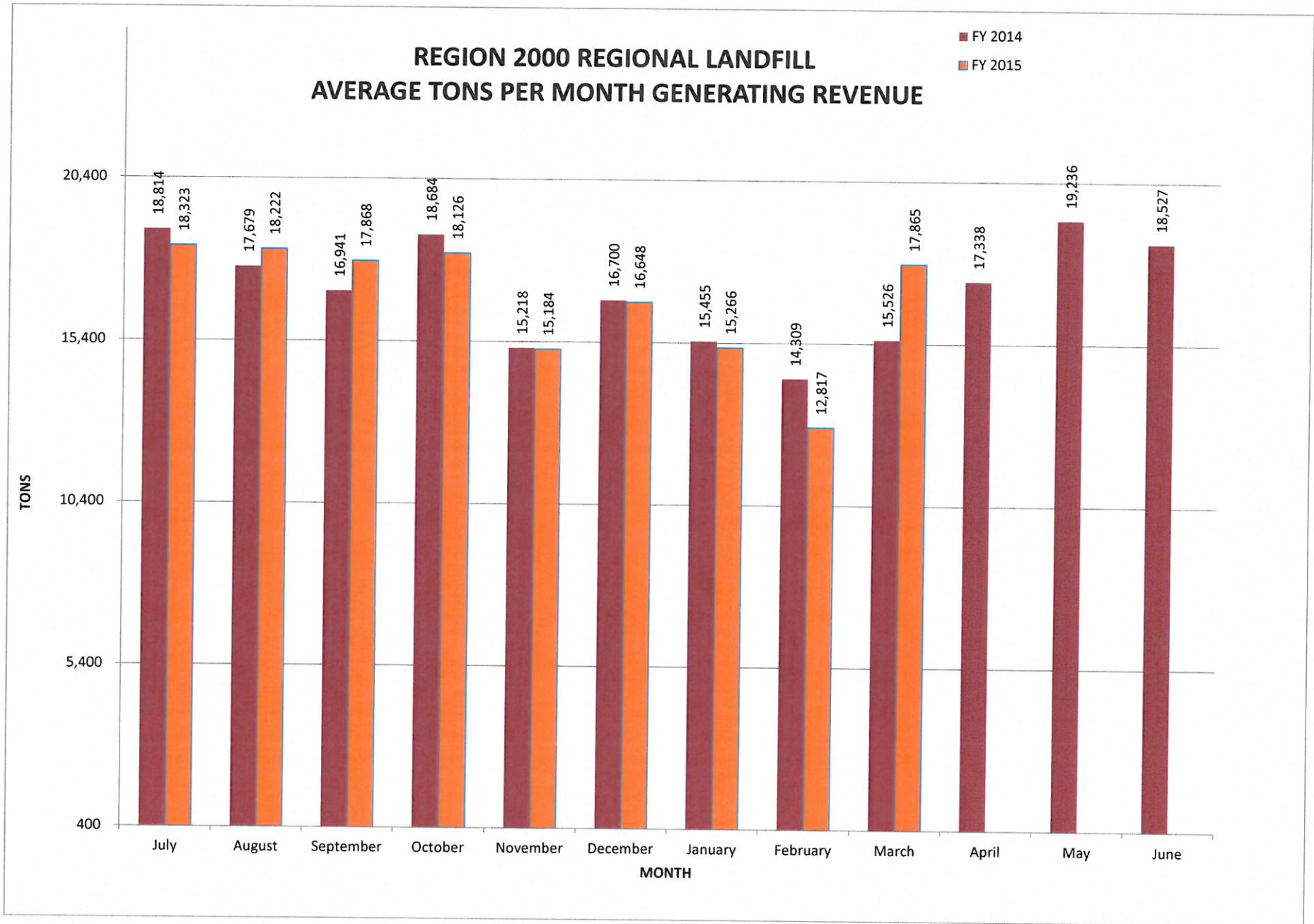
This material was prepared by public finance, or other non-research personnel of Davenport. This material was not produced by a research analyst, although it may refer to a Davenport research analyst or research report. Unless otherwise indicated, these views (if any) are the author's and may differ from those of the Davenport fixed income or research department or others in the firm. Davenport may perform or seek to perform financial advisory services for the issuers of the securities and instruments mentioned herein.

This material has been prepared for information purposes only and is not a solicitation of any offer to buy or sell any security/instrument or to participate in any trading strategy. Any such offer would be made only after a prospective participant had completed its own independent investigation of the securities, instruments or transactions and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the completeness of this material. Davenport has no obligation to continue to publish information on the securities/instruments mentioned herein. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, sale, exercise of rights or performance of obligations under any securities/instruments transaction.

The securities/instruments discussed in this material may not be suitable for all investors or issuers. Recipients should seek independent financial advice prior to making any investment decision based on this material. This material does not provide individually tailored investment advice or offer tax, regulatory, accounting or legal advice. Prior to entering into any proposed transaction, recipients should determine, in consultation with their own investment, legal, tax, regulatory and accounting advisors, the economic risks and merits, as well as the legal, tax, regulatory and accounting characteristics and consequences, of the transaction. You should consider this material as only a single factor in making an investment decision.

The value of and income from investments and the cost of borrowing may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions or companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance and estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes or to simplify the presentation and/or calculation of any projections or estimates, and Davenport does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. This material may not be sold or redistributed without the prior written consent of Davenport.

Version 01.13.14 | RT MB



REGION 2000 REGIONAL LANDFILL
LIVESTOCK ROAD FACILITY
HEALTH IMPACTS RESEARCH REPORT

WORK ORDER

1. SCOPE OF SERVICES TO BE PERFORMED:

This scope of services outlines the task identified by SCS Engineers (SCS) and the Authority to prepare a report documenting existing research related to potential health impacts to residential communities surrounding landfills. This exercise is intended to address concerns related to the Region 2000 Regional Landfill – Livestock Road Facility (Facility) in Rustburg, Virginia. The proposed scope of services involves research related to alleged health impacts attributed to sanitary landfills versus nuisance odors. The research regarding published journal articles related to alleged health impacts will assist the Authority with responding to neighbor’s concerns.

TASK 1 – RESEARCH PERTAINING TO LANDFILL HEALTH IMPACTS VERSUS NUISANCE ODORS

The Authority and SCS understand numerous research studies have been conducted investigating alleged health impacts attributed to sanitary landfills and assessment of the potential health effects versus odors which are merely a nuisance issue. The case study results and journal publications regarding this issue can assist the Authority developing responses to concerns voiced by surrounding communities. With respect to odor mitigation, such papers may outline possible courses of corrective action depending on the site-specific odor monitoring and sampling results at the Facility.

SCS will research journal publications and other industry resources, such as the Environmental Research and Education Foundation (EREF), and the various experts throughout our SCS offices nationwide for similar case studies. SCS will focus our research efforts on the potential for adverse health effects from landfilling MSW and other waste types (e.g. industrial sludge) on adjacent communities. Once the compilation of studies is completed, they will be categorized, organized, and bound for the Authority’s review. SCS will provide a breakdown of the most important conclusions from the research in the executive summary.

2. WORK ORDER SCHEDULE:

SCS is prepared to perform Task 1 immediately upon receiving notice-to-proceed.

3. COMPENSATION:

SCS will be compensated for time and expenses in accordance with SCS' standard rates in effect at the time of performance, provided that total compensation will not exceed \$4,000 without the Client's authorization.

- Task 1 – Health Impacts vs. Nuisance Odors Research \$ 4,000 budget

Total Amount of this Work Order = **\$4,000**

Any work added to the Scope of Services to be performed shall be compensated at SCS' standard fee schedule in effect at the time of performance. Attachment A provides a breakdown for completion of the activities described above.

ATTACHMENT A
 BUDGETARY FEE ESTIMATE FOR HEALTH IMPACTS RESEARCH
 LIVESTOCK ROAD REGIONAL LANDFILL

SCS ENGINEERS LABOR CATEGORY	Rate \$/hr	HEALTH IMPACTS & ODOR RESEARCH	
		Hours	Cost
Project Director	\$ 190	6	\$ 1,140
Project Manager	\$ 165		\$ -
Project Coordinator	\$ 105	3	\$ 315
Project Professional	\$ 100	10	\$ 1,000
Staff Professional	\$ 90		\$ -
Assoc. Staff Professional	\$ 80	16	\$ 1,280
TOTAL LABOR		35	\$ 3,735
OTHER DIRECT COSTS			
Auto/Maint/Mileage			
Laboratory Analysis			
Field Equipment			
Telephone/Facsimile			\$ 25
Postage/Freight			\$ 25
Reproduction/Printing			\$ 75
Computer			\$ 105
TOTAL ESTIMATED ODC's BY TASK			\$ 231
Administrative (15%)			\$ 35
TOTAL			4,000

REGION 2000 REGIONAL LANDFILL LIVESTOCK ROAD FACILITY ODOR INVESTIGATION SERVICES

WORK ORDER

1. SCOPE OF SERVICES TO BE PERFORMED:

This scope of services outlines the tasks identified by SCS Engineers (SCS) necessary to perform odor investigation activities at the Region 2000 Regional Landfill – Livestock Road Facility (Facility) in Rustburg, Virginia. The proposed scope of services is divided into an initial odor assessment (Task 1), research related to alleged health impacts attributed to sanitary landfills versus nuisance odors (Task 2), odor sampling program at the landfill facility (Task 3), and odor sampling program in surrounding communities (Task 4), which we understand the Authority intends to implement based on concerns associated with the proposed landfill expansion as voiced by residents. This phased approach will assist the Authority in identifying the potential sources of malodorous emissions at the Facility and evaluating the chemical constituents affiliated with the odors. The research regarding published journal articles related to alleged health impacts will assist the Authority with responding to neighbor's concerns. This Work Order outlines the protocols and procedures to be utilized during this phased odor investigation.

TASK 1 – PHASE I INITIAL ODOR ASSESSMENT

SCS understands that odors have been detected and reported in the general vicinity of the Landfill. SCS understands the Facility suspects the sources of the odors are likely related to both working face operations and landfill gas (LFG) fugitive emissions; however, the description of the odors from Facility personnel and the surrounding community needs to be better documented as part of the odor investigation.

SCS work efforts under this task will focus on identifying and evaluating potential on-site sources of odors, specifically fugitive LFG emissions, the Phase II LFG collection and control system, routine working face operations, disposal of special wastes, leachate management, and other aspects of the site activities. This task will involve the following activities:

- Surface emissions monitoring (SEM) immediately above the landfill surface to measure concentrations of methane (CH_4) as an indicator of fugitive LFG emissions;
- Ambient air monitoring within the facility boundary to measure concentrations of hydrogen sulfide (H_2S) as an indicator constituent for odors; and,

- Sampling of the LFG produced within the Phase III waste mass for laboratory analysis to identify the concentrations of various constituents which have generally low odor thresholds.

In addition to providing representative concentrations within the LFG and in ambient air around the facility, these initial monitoring events using field instrumentation, as well as analysis of an LFG sample, will provide input pertaining to the areas of elevated concentrations and overall viability of a more comprehensive air monitoring program that may be outlined under Tasks 3 and 4, as appropriate.

Landfill gas-related odors are most often associated with H₂S and other reduced sulfur compounds. H₂S is a colorless gas with a distinctive odor associated with rotten eggs, which is produced by the decomposition of sulfur-containing waste at a landfill. Along with compounds such as mercaptans, carbonyl sulfide, and dimethyl sulfide, these reduced sulfur constituents are most commonly associated with landfill odors. Because H₂S is the sulfide which is usually measured at the highest concentration in LFG, many Landfills utilize it as an indicator for odors.

Site Reconnaissance to Observe Operational Practices

SCS will observe and document the following:

- Daily and intermediate cover practices at the Landfill, including the types and methods of alternate daily cover, such as Posi-Shell.
- Handling and disposal methods of special wastes at the working face, including construction and demolition debris, domestic and industrial sludges, etc.
- Practices involving the collection, handling, storage, and transportation of leachate.
- Operation of the existing spark-ignited utility flares that serve to combust LFG collected from the Phase II waste disposal unit.

Ambient Air Monitoring

SCS will perform the following:

- Surface emissions monitoring to measure concentrations of CH₄ immediately above the surface of the Phase III waste disposal unit and where visual observations indicated a potential for elevated concentrations of LFG, such as pipe penetrations, distressed vegetation, leachate seeps, and surface cover cracks.
- Ambient air monitoring to measure concentrations of H₂S above and around the Phase III waste disposal unit as well as at various other locations within and along the Facility Boundary.

- Monitoring to measure concentrations of methane and/ or hydrogen sulfide in proximity to LFG system infrastructure, such as the blower/flare station, condensate sumps, select wellheads, and around other potential sources of LFG fugitive emissions (leachate manholes, etc.).

Landfill Gas Sampling

SCS will obtain one sample of landfill gas from within the Phase III waste mass via an existing conduit (vent pipe, leachate cleanout, etc.). The LFG sample will be analyzed using ASTM D-5504 (or other appropriate method) to determine the concentration of reduced sulfur compounds using gas chromatography. The sample will also be analyzed for trace constituents using TO-15 component analysis. SCS will measure and record gas quality (CH₄, CO₂, O₂, and H₂S) and pressure at the sampling port using a Landtec GEM-2000 gas analyzer or other field instrument before collecting the sample.

The sample will be placed in a metal shipping container immediately after it is collected to prevent exposure to ultraviolet light and potential degradation of the sample. The LFG sample will be shipped as dangerous goods in accordance with DOT and IATA specifications, and all applicable regulations. Chain-of-Custody documentation will be completed and the gas samples will be relinquished to the laboratory in accordance with USEPA guidelines.

SCS will prepare a report summarizing the site reconnaissance observations, field monitoring results, laboratory data, and findings related to our odor investigation. The report will document SCS' recommendations for supplemental evaluation and implementation of an air monitoring program, if warranted, as outlined under Task 2.

TASK 2 – RESEARCH PERTAINING TO LANDFILL HEALTH IMPACTS VERSUS NUISANCE ODORS

The Authority and SCS understand numerous research studies have been conducted investigating alleged health impacts attributed to sanitary landfills and assessment of the potential health effects versus odors which are merely a nuisance issue. The case study results and journal publications regarding this issue can assist the Authority developing responses to concerns voiced by surrounding communities. With respect to odor mitigation, such papers may outline possible courses of corrective action depending on the site-specific odor monitoring and sampling results at the Facility.

SCS will research journal publications and other industry resources, such as the Environmental Research and Education Foundation (EREF), and the various experts throughout our SCS offices nationwide for similar case studies. SCS will focus our research efforts on the potential for adverse health effects from landfilling MSW and other waste types (e.g. industrial sludge) on adjacent communities. Once the compilation of studies is completed, they will be categorized, organized, and bound for the Authority's review. SCS will provide a breakdown of the most important conclusions from the research in the executive summary.

TASK 3 – PHASE II LANDFILL ODOR SAMPLING

The intent of this air monitoring program is to measure concentrations of malodorous compounds (such as H₂S and other reduced sulfur compounds) present in ambient air at, or beyond, the Facility Boundary. Based on correlation of prevailing wind direction at the time of sampling, the presence or absence of these chemical constituents (or the relative concentration) would suggest whether the source of malodorous emissions is upstream or downstream of the sampling stations. Likewise, the presence of detectable constituents can be correlated to any complaints during the sampling events.

SCS will develop a work plan for this air monitoring program which documents the proposed sampling locations, the procedures involved in collecting field samples, and relevant protocol information such as chain-of-custody documentation. As applicable, this protocol should be implemented following ASTM's *Standard Practice for Planning the Sampling of the Ambient Atmosphere* (D1357)(2005). The work plan will document the specific analysis for selected constituents and the number and locations of samples.

Odor-Causing Compounds

SCS' ambient air sampling activities may involve obtaining samples that will be analyzed to measure the following chemical constituents:

- Total Reduced Sulfur (TRS) compounds;
- Volatile Organic Compounds (VOCs);
- Volatile Fatty Acids (VFAs);
- Ammonia; and,
- Aldehydes and Ketones.

Sampling Locations

SCS will perform ambient air sampling in accordance with the Work Plan. For budgetary purposes, we have assumed sampling will be performed at the working face to assess the concentrations of malodorous compounds. One sampling location adjacent to the working face will be selected based on meteorological conditions. The location will be positioned downwind of the working face. The sample will be collected starting in the early morning, so that the atmosphere is generally calm (low wind speed) and there is greater likelihood of malodorous compounds from initial waste loads.

Sampling and Analytical Methodology

The sampling and analytical activities will measure the following compounds using the proposed methods:

Compounds	Sampling Apparatus	Method
Total Reduced Sulfur	Tedlar Bag (with dedicated pump)	Composite sample over 2 hours

Compounds	Sampling Apparatus	Method
VOCs	Summa Canister (regulator/orifice plate)	Composite sample over 2 hours
VFAs	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours
Ammonia	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours
Aldehydes/Ketones	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours

If necessary adjustments will be recommended to best fit the purposes of this sampling. SCS will follow up each task of the odor investigation with a written report to the Authority to document the data collected.

The samples obtained for TRS compounds and VOCs will be sent to ATMAA for analysis by GC/MS and TO-15, respectively. The detection limits for the TRS should be in the range of 50 ppb. The detection limits for the VOCs should be in the range of 1 ppb.

The samples for VFAs, ammonia, and aldehydes/ketones will be sent to Environmental Analytical Services for analysis via EPA Method TO-17 and NIOSH 6016. The detection limits for these compounds will vary depending on the quantity of sample obtained in the cartridge and duration of sampling.

Upon completing of the air monitoring program, SCS will prepare a report summarizing the field activities including sampling locations and procedures, laboratory analytical results, site observations and meteorological data, and our findings and conclusions related to the source of odors in the general vicinity of the Facility. The report will include site maps and graphical presentations of the sampling results to facilitate internal discussions or presentation to third-parties, as appropriate. The report will document SCS' recommendations for supplemental evaluations, studies and modeling, if warranted.

TASK 4 – PHASE II RESIDENTIAL ODOR SAMPLING

The intent of this air monitoring program is to measure concentrations of malodorous compounds (such as H₂S and other reduced sulfur compounds) present in ambient air beyond the Facility Boundary, downwind of the Active Landfill in adjacent residential areas. Based on correlation of prevailing wind direction at the time of sampling, the presence or absence of these chemical constituents (or the relative concentration) would suggest whether the source of malodorous emissions is upstream or downstream of the sampling stations. Likewise, the presence of detectable constituents can be correlated to any odor complaints (and concerns regarding potential adverse health impacts) during the sampling events.

This monitoring program will also be included in the work plan, which documents the proposed sampling locations, the procedures involved in collecting field samples, and relevant protocol information such as chain-of-custody documentation. As applicable, this protocol should be implemented following ASTM's *Standard Practice for Planning the*

Sampling of the Ambient Atmosphere (D1357)(2005). The work plan will document the specific analysis for selected constituents and the number and locations of samples.

Odor-Causing Compounds

SCS' ambient air sampling activities may involve obtaining samples that will be analyzed to measure the following chemical constituents:

- Total Reduced Sulfur (TRS) compounds;
- Volatile Organic Compounds (VOCs);
- Volatile Fatty Acids (VFAs);
- Ammonia; and,
- Aldehydes and Ketones.

Sampling Locations

SCS will perform ambient air sampling in accordance with the Work Plan. For budgetary purposes, we have assumed sampling will be performed at select locations in adjacent residential areas to assess the concentrations of malodorous compounds. One or more sampling location(s) in an adjacent residential area from the landfill working face will be selected based on meteorological conditions. The location(s) will be positioned in a residential area located downwind of the working face. The samples will be collected starting in the early morning, where there is greater likelihood of malodorous compounds from initial waste loads.

Sampling and Analytical Methodology

Similar to Task 3, the sampling and analytical activities will measure the following compounds using the proposed methods:

Compounds	Sampling Apparatus	Method
Total Reduced Sulfur	Tedlar Bag (with dedicated pump)	Composite sample over 2 hours
VOCs	Summa Canister (regulator/orifice plate)	Composite sample over 2 hours
VFAs	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours
Ammonia	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours
Aldehydes/Ketones	Cartridges (Impinger Kit/Pump)	Composite sample over 8 hours

If necessary adjustments will be recommended to best fit the purposes of this sampling. SCS will follow up each task of the odor investigation with a written report to the Authority to document the data collected.

The samples obtained for TRS compounds and VOCs will be sent to ATMAA for analysis by GC/MS and TO-15, respectively. The detection limits for the TRS should be in the range of 50 ppb. The detection limits for the VOCs should be in the range of 1 ppb.

The samples for VFAs, ammonia, and aldehydes/ketones will be sent to Environmental Analytical Services for analysis via EPA Method TO-17 and NIOSH 6016. The detection limits for these compounds will vary depending on the quantity of sample obtained in the cartridge and duration of sampling.

Upon completion of the air monitoring program, SCS will prepare a report summarizing the field activities including sampling locations and procedures, laboratory analytical results, site observations and meteorological data, and our findings and conclusions related to the source of odors in the general vicinity of the Facility. The report will include site maps and graphical presentations of the sampling results to facilitate internal discussions or presentation to third-parties, as appropriate. The report will document SCS' recommendations for supplemental evaluations, studies and modeling, if warranted.

2. WORK ORDER SCHEDULE:

SCS is prepared to perform Task 1 within one week of receiving notice-to-proceed. SCS is prepared to perform Task 2 immediately upon receiving notice-to-proceed. We are available to perform Tasks 3 and 4 activities on an ongoing and as-needed basis, as directed by the Authority. Tasks 3 and 4 sampling activities would likely commence in January 2015, in order to organize sampling materials and develop a work plan.

3. COMPENSATION:

SCS will be compensated for time and expenses in accordance with SCS' standard rates in effect at the time of performance, provided that total compensation will not exceed \$26,400 without the Client's authorization.

- Task 1 – Phase I Initial Odor Assessment \$ 4,600 budget
- Task 2 – Health Impacts vs. Nuisance Odors Research \$ 4,000 budget
- Task 3 – Phase II Landfill Odor Sampling \$ 7,700 budget¹
- Task 4 – Phase II Residential Odor Sampling \$10,100 budget²

Notes:

1. Budget is dependent on the number of samples, analytical methods, and duration of the air monitoring program; assumes two samples are analyzed for the five methods.
2. Budget is dependent on the number of samples, analytical methods, and duration of the air monitoring program; assumes four samples are analyzed for the applicable methods.

Total Amount of this Work Order = **\$26,400**

Any work added to the Scope of Services to be performed shall be compensated at SCS' standard fee schedule in effect at the time of performance. Attachment A provides a breakdown for completion of the activities described above.

ATTACHMENT A
BUDGETARY FEE ESTIMATE FOR ODOR INVESTIGATION
LIVESTOCK ROAD REGIONAL LANDFILL

SCS ENGINEERS LABOR CATEGORY	Rate \$/hr	TASK 1 PHASE I ODOR ASSESSMENT		TASK 2 HEALTH IMPACTS & ODOR RESEARCH		TASK 3 PHASE II LANDFILL ODOR SAMPLING		TASK 4 PHASE II RESIDENTIAL ODOR SAMPLING		TOTAL	
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Project Director	\$ 190	3	\$ 570	6	\$ 1,140	6	\$ 1,140	4	\$ 760	19	\$ 3,610
Project Manager	\$ 165		\$ -		\$ -		\$ -		\$ -	0	\$ -
Project Coordinator	\$ 105	4	\$ 420	3	\$ 315	7	\$ 735	10	\$ 1,050	24	\$ 2,520
Project Professional	\$ 100	20	\$ 2,000	10	\$ 1,000	32	\$ 3,200	20	\$ 2,000	82	\$ 8,200
Staff Professional	\$ 90		\$ -		\$ -		\$ -		\$ -	0	\$ -
Assoc. Staff Professional	\$ 80		\$ -	16	\$ 1,280		\$ -	40	\$ 3,200	56	\$ 4,480
TOTAL LABOR		27	\$ 2,990	35	\$ 3,735	45	\$ 5,075	74	\$ 7,010	181	\$ 18,810
OTHER DIRECT COSTS											
Auto/Maint/Mileage			\$ 250				\$ 250		\$ 250		\$ 750
Laboratory Analysis			\$ 700				\$ 1,600		\$ 2,000		\$ 4,300
Field Equipment			\$ 250				\$ 100		\$ 100		\$ 450
Telephone/Facsimile			\$ 15		\$ 25		\$ 15		\$ 15		\$ 70
Postage/Freight			\$ 115		\$ 25		\$ 200		\$ 225		\$ 565
Reproduction/Printing			\$ 30		\$ 75		\$ 30		\$ 30		\$ 166
Computer			\$ 40		\$ 105		\$ 88		\$ 67		\$ 299
TOTAL ESTIMATED ODC's BY TASK			\$ 1,400		\$ 231		\$ 2,283		\$ 2,687		\$ 6,600
Administrative (15%)			\$ 210		\$ 35		\$ 342		\$ 403		\$ 990
TOTAL			4,600		4,000		7,700		10,100		\$ 26,400