

Department of Public Works 540/665-5643

FAX: 540/678-0682

MEMORANDUM

TO: Landfill Oversight Committee Members

FROM: Joe C. Wilder, Director of Public Works

SUBJECT: Meeting of November 16, 2017

DATE: November 9, 2017

There will be a meeting of the Landfill Oversight Committee on Thursday, November 16, 2017 at 11:00 a.m. in the conference room located on the second floor of the north end of the County Administration Building at 107 North Kent Street, Suite 200. The agenda thus far is as follows:

- 1. Update on Existing Projects.
- 2. Discussion of Future Projects.

(Attachment 1)

3. Proposed Fiscal Year 2018/2019 Budget.

(Attachment 2)

JCW/kco

Attachments: as stated

cc: Committee Members
Kris Tierney, County Administrator
Jay Tibbs, Deputy County Administrator
Ron Kimble, Landfill Manager
Andrew Clark, Environmental Manager
Gloria Puffinburger, Solid Waste Manager
file

Future Projects at Landfill

Projected during the 2018/2019 budget process

(Based on projected waste disposal of 160,000 – 175,000 tons per year)

FY 18/19	60, 000 Generator Service	\$900,000
FY 20/21	Partial Closure CDD Landfill (10 Acre)	\$2,000,000
FY 22/23	New (1) Megawatt Generator	\$1,500,000
FY 22/23	Upgrade Power line to Substation	\$1,500,000
FY 24/25	Closure MSW Phase 2 Cell A/B (20 Acre)	\$4,000,000
	Future Cell Development	
FY 20/21	Rough Grading and Rock Crushing	\$4,500,000
FY 21/22	Leachate Stone 50,000 ton @ \$25/ton	\$1,250,000
FY 21/22	Cell Construction MSW Phase 3 Cell A	\$2,750,000
	11 Acres	

Total \$18,400,000

4204

REFUSE DISPOSAL – LANDFILL

DESCRIPTION:

The Frederick County Sanitary Landfill provides non-hazardous solid waste disposal needs for Frederick and Clarke Counties and the City of Winchester. The landfill property includes 932 acres of which 90 acres have been permitted under Subtitle "D" Regulations as a municipal solid waste facility, and 50 acres permitted as a Construction Demolition Debris waste facility. The additional acreage is maintained as borrow area and buffer.

In addition to operating the two permitted landfills, the facility operates a fully equipped Citizen's Convenience Center offering disposal options for several waste streams including: household municipal, construction demolition debris, household hazardous waste, electronics, and numerous other recycling opportunities.

A program to convert landfill gas to electricity was established in 2010. Currently two Jenbacher model 320 engines are fueled by the landfill gas and are capable of producing approximately two megawatts of power. This program is designed to expand as the landfill continues to grow.

In addition, the landfill operates and maintains a leachate pretreatment system designed to collect and provide treatment from all three of the permitted landfills located at the facility.

GOALS:

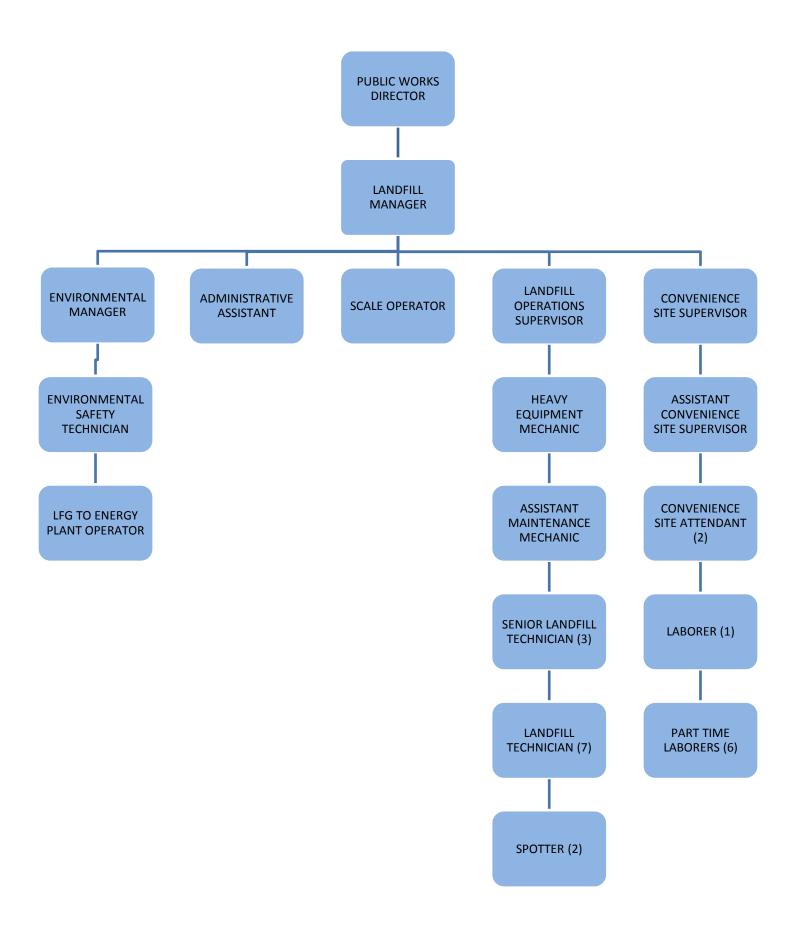
- Maintain vegetative cover on exposed soils by overseeding and fertilizing, increase frequency of mowing established vegetation.
- Improve management of stormwater control features.
- Work with local wastewater treatment plants to improve sludge management procedures.
- Increase safety awareness of all landfill employees and continuing education of operators.
- Begin preliminary base grade excavation for construction Phase 3 Cell A MSW Landfill cell.
- Modify leachate system to better manage collection, treatment and disposal.
- Maintain and expand landfill gas collection system as needed to maximize collection efficiency.
- Expand landfill gas perimeter monitoring network around CDD landfill to maintain compliance.
- Conduct major overhaul of both Jenbacher engines to maintain manufacturer warranties.
- Maximize electrical production from landfill gas collected.
- Strive for waste reduction through recycling, composting, brush grinding, tire shredding, etc.

PERFORMANCE INDICATORS:	FY 2017	FY 2018	FY 2019
	Actual	Projected	Projected
Tons of waste weighed and disposed	167,617	160,000	170,000
Megawatt/hours of power generated from Gas to Energy Plant	11,989	10,512	10,512
Gallons of pretreated leachate collected and discharged	16,492,000	20,000,000	20,000,000
Tons of scrap metal recycled	1,294	800	1000
Tons of household hazardous waste collected	67	100	100
Tons of tires processed to rubber chips	1,205	1,100	1,100
Tons of yard waste processed to mulch	5,778	7,500	6,000

BUDGET SUMMARY:

	FY 2017 Actual	FY 2018 Approved Budget	FY 2018 Estimated Budget	FY 2019 Adopted Budget	Increase/De FY 2018 App. T Amount	
Control	Actual	Buuget	Duuget	Budget	Allioulit	70
Costs:						
Personnel Operating	1,906,723	2,063,983			44,378	2.20%
Capital/Leases	2,087,508	2,857,258			-28,572	-0.99%
TOTAL	2,378,516	4,811,000			2,681,000	125.87%
	6,372,747	9,732,241	7,034,376	9,732,241	2,696,806	38.33%
Revenue:						
Fees						
State/Federal	7,338,267	6,734,695			345,225	5.40%
Local/Reserves	0	0			0	0.00%
TOTAL	0	2,997,546			2,351,581	364.04%
	7,338,267	9,732,241	7,034,376	9,732,241	2,696,806	38.33%
Full-time Positions						
	27	27	<u>_</u>		0	0.00%

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11/01/2017	COUNTY OF FREDERICK	-BUDGET-	EXPENSE	ACCOUNTING PERIOD 2017/10
FUND #-012 I	FRED . WINC LANDFILL FUND			

		Prior Years	Prior Years	Amended	Actual On	Dept Request	Admin
		FY/2016	FY/2017	Budget	2017/10	FY2019	Reques
42040	LANDFILL						
42040 -000-000	REFUSE DISPOSAL						
42040-1000-000-000	PERSONNEL SERVICES						
42040-1001-000-001	COMPENSATION OF PUBLIC WORKS						
42040-1001-000-002	LANDFILL MANAGER	85,870	108,530	91,470	21,306	85,222	
042040-1001-000-003	ENVIRONMENTAL MANAGER	71,931	65,833	76,411	15,899	63,596	
42040-1001-000-004	ADMINISTRATIVE COSTS	142,955	170,175	151,566	32,010	128,040	
42040-1001-000-005	HEAVY EQUIPMENT MECHANIC	63,261	65,222	67,432	16,858	67,432	
42040-1001-000-036	SECRETARY III				·		
42040-1001-000-056	SCALE OPERATOR	57,689	38,839	39,072	9,768	39,072	
42040-1001-000-057	ADMINISTRATIVE ASSISTANT	42,099	43,714	45,195	11,299	45,195	
42040-1001-000-058	ASST.CONVENIENCE CENTER SUPER.	28,207	21,310	31,331	4,331	38,800	
42040-1001-000-066	SPOTTER	32,841	34,063	35,228	8,807	35,228	
42040-1001-000-067	MAINTENANCE MECHANIC ASSISTANT	15,425	32,930	34,015	8,504	34,016	
42040-1001-000-068	LABORER	7,225	29,705	30,711	7,678	30,712	
42040-1001-000-069	LANDFILL TECHNICIAN	35,311	31,293	36,786	8,977	33,506	
42040-1001-000-070	SR LANDFILL TECHNICIAN	39,202	40,460	41,861	10,465	41,861	
42040-1001-000-071	SR LANDFILL TECHNICIAN	43,323	27,138	44,923	·	44,923	
42040-1001-000-072	LANDFILL TECHNICIAN	36,795	38,212	39,463	9,866	39,464	
42040-1001-000-081	LANDFILL TECH	32,300	33,183	34,263	8,566	34,264	
42040-1001-000-082	LANDFILL TECHNICIAN	38,175	39,400	40,755	10,189	40,756	
42040-1001-000-083	LFG TO ENERGY PLANT OPER.	54,225	55,878	57,761	14,440	57,760	
42040-1001-000-084	LANDFILL TECHNICIAN III	,	,	,	·	,	
42040-1001-000-085	LABORER I 1/2						
42040-1001-000-086	LANDFILL OPERATIONS SUPV	58,244	60,084	62,151	15,538	62,151	
42040-1001-000-087	LABORER II	,	,	,	,	,	
42040-1001-000-088	LANDFILL TECHNICIAN	38,604	21,235	40,069	4,512	34,000	
42040-1001-000-089	SPOTTER	19,870	22,377	30,090	5,167	31,000	
42040-1001-000-090	CONVENIENCE SITE SUPERVISOR	29,111	46,537	48,136	12,034	48,136	
42040-1001-000-091	LABORER	27,009	27,761	28,676	7,169	28,676	
42040-1001-000-092	LABORER II	,	,	,	,	,	
42040-1001-000-093	SR LANDFILL TECHNICIAN	43,349	44,671	46,183	11,546	46,184	
42040-1001-000-094	ENVIRONMENTAL SAFETY TECH.	46,590	42,753	51.812	9,583	46,000	
42040-1001-000-095	LANDFILL TECHNICIAN	33,727	34,757	35,881	8,970	35,881	
42040-1001-000-096	LANDFILL TECHNICIAN	38,070	39,192	40,512	10,128	40,513	
42040-1001-000-097	LABORER	27,009	27,778	28,701	2,392	28,006	
42040-1001-000-098	LABORER	=: ,000	_:,::0		_,362		
42040-1003-000-000	PART TIME/EXTRA HELP	52,390	67,405	93,600	23,287	98,280	
42040-1005-000-000	OVERTIME	55,393	53,889	67,980	13,522	67,980	
42040-1005-000-001	OVERTIME - INVESTIGATIVE	11,000	,,,,,,,,,	- ,,,,,,	-,,	- ,,,,,,,	
42040-1009-000-000	MERIT RESERVE					+	
42040-1099-000-000	CHANGE IN ACCRUED LEAVE	-8,341					
	PERSONAL SERVICE	1,287,859	1,364,324	1,472,034	322,811	1,426,654	

042040-2000-000-000	FRINGE BENEFITS						
042040-2001-000-000	F. I. C. A.	93,611	98,732	111,215	23,751	109,134	
042040-2002-000-000	RETIREMENT - V. S. R. S.	123,351	108,460	120,562	25,528	115,956	
042040-2005-000-000	HOSPITAL/MEDICAL PLANS	249,200	259,720	311,060	68,888	325,936	
042040-2006-000-000	GROUP INSURANCE	13,835	15,444	17,167	3,635	16,511	
042040-2007-000-000	ACCRUED VACATION PAY		,	,	,	,	
042040-2008-000-000	SHORT & LONG TERM DISABILITY	947	1,536	1,600	487	1,800	
042040-2011-000-000	WORKER'S COMPENSATION	54,001	57,463	62,762	12,270	47,688	
042040-2013-000-000	EDUCATION - TUITION ASSISTANCE		,	,	,	,	
042040-2099-000-000	FRINGE BENEFIT RESERVE						
	FRINGE BENEFITS	534,945	541,355	624,366	134,559	617,025	
042040-3000-000-000	CONTRACTUAL SERVICES		,	,	,	,	
042040-3001-000-000	PROFESSIONAL HEALTH SERVICES	229	1,400	1,500		1,500	
042040-3002-000-000	PROFESSIONAL SERVICES OTHER	309,849	433,315	440,000	71,452	500,000	
042040-3002-000-001	STATE PERMIT FEES	29,746	30,892	36,800	32,153	39,600	
042040-3002-000-002	PROFESSIONAL SVC - INVESTIGATI		,		,	,	
042040-3003-000-000	TEMPORARY HELP SERVICE FEES						
042040-3004-000-001	REPAIR AND MAINTENANCE-EQUIP.	69,233	24,601	170,000	6,655	130,000	
042040-3004-000-002	REPAIR AND MAINTENANCE - VEHIC	7,642	9,096	12,000	455	12,000	
042040-3004-000-003	REPAIR AND MAINTENANCE - BUILD	30,682	20,758	35,000	165	30,000	
042040-3004-000-004	REPAIR AND MAINTENANCE-GENERATOR	114,997	91,108	120,000	3,268	80,000	
042040-3005-000-000	MAINTENANCE SERVICE CONTRACTS	15,598	17,028	25,350	573	25,350	
042040-3005-000-001	GENERATOR OIL SAMPLING	2,724	5,435	6,500		6,500	
042040-3007-000-000	ADVERTISING	2,152	2,214	3,000	383	3,000	
042040-3010-000-000	OTHER CONTRACTUAL SERVICES	278,172	295,710	418,020	31,950	510,020	
042040-3010-000-001	CONTRACTUAL SERV TIRE PROGRAM	51,404	79,878	110,000	14,409	142,500	
042040-3010-000-002	RTOP OPERATIONAL COSTS						
042040-3010-000-003	REGIONAL ELECTRONICS RECYCLING	78,500	83,600	66,000	11,400	91,200	
	PURCHASED SERVICES	990,928	1,095,035	1,444,170	172,863	1,571,670	
042040-4000-000-000	INTERNAL SERVICES						
042040-4001-000-000	DATA PROCESSING SERVICES						
042040-4003-000-001	CENTRAL STORES-COPIES						
042040-4003-000-002	CENTRAL STORES-GASOLINE						
042040-5100-000-000	UTILITIES						
042040-5101-000-000	ELECTRICAL SERVICES	34,013	37,439	45,000	2,624	45,000	
042040-5101-000-001	ELECTRICAL SERVINTERCONNECTION	20,368	24,071	26,000	1,840	26,000	
042040-5102-000-000	HEATING SERVICES	3,952	8,803	6,000		10,000	
042040-5204-000-000	POSTAGE AND TELEPHONE	13,452	13,026	18,060	3,156	18,060	
042040-5204-000-001	POSTAGE AND SHIPPING-GENERATOR	1,473	1,749	5,000	181	2,160	
042040-5301-000-000	BOILER INSURANCE	723	699	798	738	798	
042040-5302-000-000	FIRE INSURANCE	13,952	14,850	17,000	16,374	17,000	
042040-5305-000-000	MOTOR VEHICLE INSURANCE	4,826	6,049	6,250	5,118	6,250	
042040-5306-000-000	SURETY BONDS	24	29	40	29	40	
042040-5308-000-000	GENERAL LIABILITY INSURANCE	5,197	6,005	6,500	5,743	6,500	

042040-5401-000-000	OFFICE SUPPLIES	8,707	6,806	10,000	1,653	10,000	
042040-5403-000-000	AGRICULTURAL SUPPLIES	1,361	1,739	10,000		15,000	
042040-5404-000-000	MEDICAL AND LABORATORY SUPPL	1,445	1,883	2,500	401	2,500	
042040-5405-000-000	LAUNDRY & JANITORIAL SUPPLIES	3,804	3,489	6,000	761	6,000	
042040-5407-000-000	REPAIR AND MAINTENANCE SUPPL	26,415	23,492	30,000	441	30,000	
042040-5408-000-000	VEHICLE AND POWERED EQUIPMENT	103,683	97,967	150,000	12,528	180,000	
042040-5408-000-001	VEHICLES-TIRES AND PARTS	1,379	282	4,500	392	4,500	
042040-5408-000-002	VEHICLE-FUELS AND LUBRICANTS	160,235	163,651	303,700	24,556	303,700	
042040-5408-000-003	GENERATOR SPARE PARTS	343,849	61,664	150,000	473	100,000	
042040-5408-000-004	GENERATOR LUBRICANTS	34,065	28,978	48,740	10,783	48,740	
042040-5410-000-000	UNIFORMS	5,712	5,828	7,000	636	23,450	
042040-5410-000-001	SAFETY EQUIPMENT		462	4,500		2,500	
042040-5411-000-000	BOOKS & SUBSCRIPTIONS		535	1,500	551	1,500	
042040-5413-000-000	OTHER OPERATING SUPPLIES	13,869	9,989	10,000	4,267	12,000	
042040-5413-000-001	OTHER OPERATING SUPPLIES-GENERAT	5,755	2,072	60,612	30,843	40,000	
042040-5506-000-000	TRAVEL	9,832	3,945	12,000	925	12,000	
042040-5506-000-001	LANDFILL GAS GENERATOR TRAINING	3,712	· ·	10,000	276	10,000	
042040-5604-000-000	OTH. PAYMENTS OR CONTRIBUTIONS	167,807	174,088	160,000		170,000	
042040-5800-000-000	MISCELLANEOUS		·	· · · · · · · · · · · · · · · · · · ·		`	
042040-5801-000-000	DUES AND ASSOC.MEMBERSHIPS	1,622	1,433	2,000	1,116	2,000	
042040-5806-000-000	RESERVE FOR CONTINGENCIES	,	·		·	315,892	
042040-5806-000-001	POST CLOSURE COSTS	283,092	291,450	320,000		320,000	
042040-5806-000-002	CONTINGENCY-TIPPING FEE ADJUST		·	· · · · · · · · · · · · · · · · · · ·		`	
042040-5806-000-003	PAYMENTS TO LOCALITIES						
042040-5810-000-000	PAYMENT OF UNEMPLOYMENT CLAIMS			10,000		10,000	
042040-5810-000-001	EEOC CLAIMS					,	
	OTHER CHARGES	1,274,324	992,473	1,443,700	126,405	1,751,590	
042040-8001-000-000	MACHINERY AND EQUIPMENT						
042040-8002-000-000	FURNITURE AND FIXTURES						
042040-8003-000-000	COMMUNICATIONS EQUIPMENT			5,000		15,000	
042040-8005-000-000	MOTOR VEHICLES AND EQUIPMENT		26,658	95,000	31,094	35,000	
042040-8006-000-000	CONSTRUCTION VEHICLES & EQUIP	1	651,874	961,000	·	630,000	
042040-8007-000-000	INTEGRATED TECHNOLOGY EQUIPMENT			5,000		5,000	
042040-8009-000-000	MISCELLANEOUS EQUIPMENT		5,990	10,000		25,000	
042040-8009-000-001	MISCLANDFILL GAS GENERATORS		·	20,000		10,000	
042040-8700-000-000	LAND			· · · · · · · · · · · · · · · · · · ·		`	
042040-8800-000-000	BUILDINGS						
042040-8900-000-000	IMPROVEMENTS OTHER THAN BUILDING		43,180	3,330,000		1,345,000	
042040-8900-000-001	SITE DEVELOPMENT		1,650,776				
042040-8901-000-000	LOSS ON DISPOSAL						
042040-8999-000-000	INTEREST EXPENSE						
	CAPITAL OUTLAY	1	2,378,478	4,426,000	31,094	2,065,000	
042040-9000-000-000	DEPRECIATION		. , -		·		
042040-9001-000-000	LEASE/RENT OF EQUIPMENT	621	38	40,000		40,000	
042040-9500-000-000	DEPRECIATION OF EQUIPMENT	1,974,437		500,000		·	
042040-9500-000-001	DEPRECIATION OF EQUIPGENERAT			75,000			
	OTHER USES OF FUNDS	1,975,058	38	615,000		40,000	
		, -,		- /		- /	

	TOTAL DEPARTMENT	6,063,115	6,371,703	10,025,270	787,732	7,471,939	
093010 -000-000	TRANSFERS						
093010-2011-000-000	WORKER'S COMP FOR WELLNESS	77	44				
	FRINGE BENEFITS	77	44			0	
093010-5807-000-001	MERIT RESERVE	1,970	1,000	-32,427			
093010-5807-000-002	MERIT RESERVE FRINGES						
	OTHER CHARGES	1,970	1,000	-32,427		0	
	TOTAL DEPARTMENT	2,047	1,044	-32,427		0	
TOTAL FOR FUND		6,065,162	6,372,747	9,992,843	787,732	7,471,939	

EPARTMENT	LANDFILL			DI	EPARTMENT CODE	12-4204
			SOURCES	OF FUNDS		
REVENUE LINE ITEM	FUNDING SOURCES	SVC-GENERATED/ OTHER REVENUE	STATE	FEDERAL	PROVIDED FROM LOCAL SOURCES	TOTAL
1501-01	Interest on Bank Deposits	120,000				120,000
1502-01	Sale of Junk					75,000
	Scrap recycling	75,000				
1608-05	Sanitary Landfill Fees					6,562,000
	Based on Tonnage of 170,000					
	Commercial/Industrial					
	\$50/ton x 41% x 170,000 ton	3,485,000				
	Municipal					
	\$20/ton x 25% x 170,000 ton	850,000				
	Construction Demolition Debris					
	\$45/ton x 19% x 170,000 ton	1,453,500				
	Municipal Sludge					
	\$38/ton x 10% x 170,000	646,000				
	Rubble/Concrete/Rock					
	\$15/ton x 5% x 170,000	127,500				

8-Nov Subtotal 6,757,000

EPARTMENT	LANDFILL			DE	PARTMENT CODE	12-4204
			SOURCES	OF FUNDS		
REVENUE LINE ITEM	FUNDING SOURCES	SVC-GENERATED/ OTHER REVENUE	STATE	FEDERAL	PROVIDED FROM LOCAL SOURCES	TOTAL
1608-08	Tire Charges/Reimbursement					142,500
	Based on 1,500 ton of tires delivered yearly					
	NSVRC (RTOP) Members					
	\$80 x 25% x 1500 = 30,000	30,000				
	Commercial					
	\$100 x 75% x 1500 = 112,500	112,500				
1608-11	E-Cycle Collections	91,200				91,200
	Fees collected for the collection of electronics					
	& unacceptable waste paid by haulers					
	\$3800 x 2 x 12 months					
1608-13	Gas to Energy	312,837				312,837
	\$29.76/mwh x 1.5mwh/hr x 80% x 8760hrs					
1608-14	Renewable Energy Credit	168,402				168,402
	1.5 x 8,760 x 80% x \$16.02					

8-Nov TOTAL 7,471,939

DESCRIPTION	12-4204	DEPARTMENT CODE		EPARTMENT LANDFILL
Required extra help necessary for mowing, litter control, tire grinding and convenience center staffing. 6 people x 30 hr/week x\$10.50/hr x 52 weeks 12-4204-1005 Overtime / Holiday Work Overtime = 1716 hours/yr X \$30/hr = \$51,480 Holiday work = 550 hours/yr X \$30/hr = \$16,500 12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees) 10-000	OTAL AMOUN		DESCRIPTION	
and convenience center staffing. 6 people x 30 hr/week x\$10.50/hr x 52 weeks 12-4204-1005 Overtime / Holiday Work Overtime = 1716 hours/yr X \$30/hr = \$51,480 Holiday work = 550 hours/yr X \$30/hr = \$16,500 12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 2. Environe 6. Treasurer (credit Card Fees) 1. Surveying-Marsh & Legge 2. Environental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees)	98,280		Part Time Help / Convenience Center Staffing	12-4204-1003
12-4204-1005 Overtime / Holiday Work Overtime = 1716 hours/yr X \$30/hr = \$51,480 Holiday work = 550 hours/yr X \$30/hr = \$16,500 12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees)			Required extra help necessary for mowing, litter control, tire grinding	
12-4204-1005 Overtime / Holiday Work 66 Overtime = 1716 hours/yr X \$30/hr = \$51,480 51,480 Holiday work = 550 hours/yr X \$30/hr = \$16,500 16,500 12-4204-3001-00 Professional Health Services 1 Hepititis B vaccinations for new hires 50,000 1. Surveying-Marsh & Legge 50,000 2. Environmental Monitoring, Sampling and CQA 125,000 3. Northern Shenandoah Valley Regional Commission 20,000 4. Gas Management Design Services-SCS Engineers 150,000 5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees) 10,000			and convenience center staffing.	
Overtime = 1716 hours/yr X \$30/hr = \$51,480 Holiday work = 550 hours/yr X \$30/hr = \$16,500 12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees) 116,500 51,480 51,480 51,480 51,480 51,480 51,480 16,500			6 people x 30 hr/week x\$10.50/hr x 52 weeks	
Holiday work = 550 hours/yr X \$30/hr = \$16,500 12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 16,500 16,500 10,000	67,980		Overtime / Holiday Work	12-4204-1005
12-4204-3001-00 Professional Health Services Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees) 10,000		51,480	Overtime = 1716 hours/yr X \$30/hr = \$51,480	
Hepititis B vaccinations for new hires 12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 50,000 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 10,000		16,500	Holiday work = 550 hours/yr X \$30/hr = \$16,500	
12-4204-3002-00 Professional Services 1. Surveying-Marsh & Legge 50,000 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 10,000	1,500		Professional Health Services	12-4204-3001-00
1. Surveying-Marsh & Legge 2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 50,000 4. Gas Management Professional Services 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 10,000			Hepititis B vaccinations for new hires	
2. Environmental Monitoring, Sampling and CQA 3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 125,000 120,000 150,000 10,000	500,000		Professional Services	12-4204-3002-00
3. Northern Shenandoah Valley Regional Commission 4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 20,000 150,000 10,000		50,000	1. Surveying-Marsh & Legge	
4. Gas Management Design Services-SCS Engineers 5. Leachate Treatment/Management Professional Services 6. Treasurer (credit Card Fees) 150,000 10,000		125,000	2. Environmental Monitoring, Sampling and CQA	
5. Leachate Treatment/Management Professional Services 20,000 6. Treasurer (credit Card Fees) 10,000		20,000	3. Northern Shenandoah Valley Regional Commission	
6. Treasurer (credit Card Fees) 10,000		150,000	4. Gas Management Design Services-SCS Engineers	
		20,000	5. Leachate Treatment/Management Professional Services	
7 Engineering Convince (Coll Construction)		10,000	6. Treasurer (credit Card Fees)	
7. Engineering Services (Cell Construction)		125,000	7. Engineering Services (Cell Construction)	

8-Nov Subtotal 667,760

EPARTMENT	LANDFILL		DEPARTMENT CODE	12-4204
EXPENI LINE	-	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-	3002-01	State Permit Fees		39,600
		Title V Annual permit fee	7,000	
		Solid Waste permit #40	1,500	
		Solid Waste permit #591	5,500	
		Solid Waste permit #529, \$.14 X 140,000 tons of MSW Waste	19,600	
		Tire Processing	6,000	
12-4204-	-3004-01	Repair and Maintenance - Equipment		130,000
		Repairs that need to be made to equipment because of		
		inadequate facilities or tools that prevent landfill heavy equipment		
		mechanic from performing work.		
		Anticipate additional expenses due to age of equipment.		
12-4204-	3004-02	Repair and Maintenance - Vehicles		12,000
		This figure reflects the amount for installation of new tires and		
		miscellaneous repairs and maintenance of vehicles that landfill heavy		
		equipment mechanic cannot perform.		
12-4204-	3004-03	Repair and Maintenance - Buildings and Grounds		30,000
		This figure reflects the anticipated work related to maintenance for		
		electrical service and fencing, litter fence and upkeep. Expenses have		
		increased due to electrical repairs for pumps and associated equipment.		

8-Nov Subtotal 211,600

	2018-2019 BUDGET INFORMATION - EXPENDITURES			
DEPARTMENT	LANDFILL		DEPARTMENT CODE	12-4204
EXPENDI LINE IT		DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-30	004-04	Repair and Maintenance - Generators		80,000
		(Gas to Energy)		
		This figure represents repairs to be made to generators and ancilliary	80,000	
		equipment by others.		
12-4204-30	005-00	Maintenance Service Contracts		25,350
		PraxAir \$300/month X 12	3,600	
		(Tank & welding supplies since all work is performed in house)		
		Scale maintenance: Calibrate scales 2 X year @ \$2,125 each	4,250	
		Fire X \$5,000 X 2 Events	10,000	
		(Service on fire supression systems on heavy equipment)		
		OSHA Certification on overhead crane and forklift	2,500	
		Leachate Line Flushing	5,000	
12-4204-3005-01	005-01	Generator Oil Samples		6,500
		Annual Subscription for weekly sampling		
12-4204-30	007-00	Advertising		3,000
		Includes ads for Household Hazardous Waste Collections, E-Cycle,		
		Holiday closings and other special events.		

8-Nov Subtotal 114,850

ARTMENT LANDFILL		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-3010-00	Other Contractual Services		445,320
	Rags / Rug Rentals \$750/month X 12	9,000	
	Water Coolers	3,120	
	5 gallon water containers 10- per week X \$6.00 each X 52 weeks		
	Leachate Treatment	41,600	
	Costs for monitoring, testing and maintaining leachate system		
	(includes laboratory testing)		
	\$800/week X 52 weeks		
	Brush Grinding	90,000	
	Private contractor to grind brush (two times/year)		
	Assume 6,000 tons x \$15/ton= \$90,000		
	Household Hazardous Waste	120,000	
	Costs for Environmental Company to Package and Remove these		
	special wastes. Estimate \$10,000 / month		
	Wastewater Disposal Fees	130,000	
	Leachate pumped to Opequon Water Reclamation Facility, Based on 20,000,000 gal/year X \$6.50/1000 gal		
	Septage Pump and Haul \$300/month X 12	3,600	
	Rock Crushing Aggregate	48,000	
	*Separate approximately 4,000 tons concrete@ \$12/crushed ton		

8-Nov Subtotal 445,320

2018-2019 BUDGET INFORMATION - EXPENDITURES			
DEPARTMENT LANDFILL DEPA			12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-3010-00	Office floor stripping and waxing (2x year @ \$750)	1,500	64,700
	Ductwork Cleaning 2x year (Office and maintneance shop)	1,200	
	CAT Subscription (To allow mechanic to work on equipment)	3,000	
	GPS Subscription - Trimble landfill module	9,000	
	Scrap Metal Hauling	50,000	
12-4204-3010-01	Tire Grinding- Local Tires		142,500
	Costs related to grinding tires by the Northern Shenandoah Planning		
	Commisssion. Cost is offset by equal revenue reimbursement.		
12-4204-3010-03	Regional Electronics Recycling Program		91,200
	Costs related to disposal of wastes collected at E-Cycle programs		
	Estimate \$7,600/month x 12 months= \$91,200		
12-4204-5101-00	Electrical Services		45,000
	Increased based on the additional electrical load for stationary tire grinder		
12-4204-5101-01	Electrical Services - Interconnection Fees		26,000
	Fees paid to Rappahannock Electric Cooperative for use of power lines		
	to transport power from GTE plant to utility substation.		
12-4204-5102-00	Heating Services (LP)		10,000
	Based on using LP gas rather than landfill gas		

8-Nov Subtotal 379,400

DEPARTMENT LANDFILL		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-5204-00	Postage and Telephone		18,060
	AT&T \$21/month X 12 X 5	1,260	
	Long Distance: \$100/month X 12	1,200	
	Two Way Radio Repeator Tower Rental \$175 X 12	2,100	
	Mobile Telephone	6,000	
	Average Monthly Charge \$50/month X 12 X 10		
	Internet Fees		
	\$75/month X 12 x 5 cellular modems	4,500	
	Postage	3,000	
	Average \$250/ month x 12 months = \$3,000		
12-4204-5204-01	Postage and Shipping - Gas to Energy		2,160
	Oil Analysis shipping 52 weeks X \$30	1,560	
	Ship GEM for calibration 2 times/year	600	
12-4204-5301-00	Boiler Insurance		798
	Air Compressors 3 X \$266		
12-4204-5302-00	Fire Insurance		17,000

8-Nov Subtotal 38,018

PARTMENT LANDFILL		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUN (PER LINE ITEN
12-4204-5305-00	Motor Vehicle Insurance		6,250
	1997 Chevy S-10 (Tag# 30-798L)	625	
	2000 Dodge Van (Tag# 179-640L)	625	
	2006 Chevrolet Colorado (Tag# 130-750L)	625	
	2012 Ford F250 4x4 (Tag# 105-202L)	625	
	2012 Ford F250 4x4 (Tag# 152-325L)	625	
	2015 Ford F350 4x4 (Tag # 187-463L)	625	
	2016 Ford F250 4x4 (Tag# 179-895L)	625	
	2017 Ford F-150 4x4 (Tag# 197-603L)	625	
	2017 Ford F-450 (Litter Buggy, Tag#)	625	
	2018 Ford F-150 (Tag# 201-126L)	625	
12-4204-5306	Surety Bonds		40
124204-5308-00	General Liability Insurance		6,500
12-4204-5401-00	Office Supplies		10,000
	Computer paper, disks, scale tickets, etc.		
12-4204-5403-00	Agricultural Supplies		15,000
	Seed, fertilizer and mulch to establish vegetation on disturbed areas		
12-4204-5404-00	Medical and Laboratory Supplies		2,500
	To replenish existing first aid kits (Based on historical use)		•

8-Nov Subtotal 40,290

DEPARTMENT	LANDFILL		DEPARTMENT CODE	12-4204
	IDITURE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204	1-5405-00	Laundry and Janitorial Supplies		6,000
		Average \$500/ month x 12 months = \$6,000		
12-4204	1-5407-00	Repair and Maintenance - Buildings and Grounds		30,000
		Gravel, signs, road salt, etc.		
		Based on previous year cost and projected in-house projects		
12-4204	1-5408-00	Repair and Maintenance - Powered Equipment		180,000
		Parts: \$15,000/month X 12 months		
12-4204	I-5408-01	Miscellaneous (motor vehicles)		4,500
		For licensed vehicles (Based on average of previous years spending)		
12-4204	I-5408-02	Fuels and Lubricants (Landfill)		303,700
		Gas: 200 gal/wk. X \$2.25 X 52 weeks	23,400	
		Diesel: 2,000 gal/wk. X \$2.50 X 52 weeks	260,000	
		Lubricants: engine oil, hydraulic fluids, grease, diesel exhaust fluid	17,000	
		Antifreeze: 220 gal/year X \$15.00	3,300	
12-4204-5408-03	1-5408-03	Generator Spare Parts - Gas to Energy		100,000
		Costs associated with maintenance of generators and associated		
		equipment, including air compressor, gas treatment skid, and flare		
		based on historical averages.		

8-Nov Subtotal 624,200

		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-5408-04	Generator Lubricants - Gas to Energy		48,740
	6 oil changes/yr. 220 gal X \$16/gal X 2 units	42,240	
	Glycol 500 gal/yr. X \$10	5,000	
	Misc Bearing Grease and Lubricants	1,500	
12-4204-5410-00	Uniforms		23,450
	20 people x \$1000yr = \$20,000	20,000	
	23 people x \$150yr /boot allowance = \$3450	3,450	
12-4204-5410-01	Safety Equipment		2,500
	Personal Protective Equipment inculding safety vests, respirators, gloves		
	and other equipment		
12-4204-5411-00	Books and Subscriptions		1,500
	Safety Films		
12-4204-5413-00	Other Operating Supplies		12,000
	Includes miscellaneous specialty tools	12,000	
	Based on 5 year average		
	Other Organities Counties Contains		40.000
12-4204-5413-01	Other Operating Supplies - Gas to Energy	10,000	40,000
	Specialty Tools required to perform maintenance	10,000	

8-Nov Subtotal 128,190

PARTMENT LANDFILL		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-5506-00	Travel / Training		12,000
	Required training for maintaining landfill certification.		
	Twelve people @ \$1000/ea. (Includes training costs, travel and per diem.)		
12-4204-5506-01	Gas to Energy - Travel - Training		10,000
	Plant operator to attend Jenbacher training event and PJM certification		
	training (2 operators @ \$2,500/class + travel expenses)		
12-4204-5604-00	Payments to other Municipalities		170,000
	Distribution of recycling funds. Proportioned by Population		
	Based on \$1/ton X 170,000 tons/year.		
	Frederick County - 64.5% = \$109,650	109,650	
	Clarke County - 12.7% = \$21,590	21,590	
	Winchester - 22.8% = \$38,760	38,760	
12-4204-5801-00	Dues and Memberships		2,000
	SWANA Membership (10 Members @ \$200/ea.)		
12-4204-5806-00	Reserve for Contingencies		315,892
12-4204-5806-01	Post Closure Financial Assurance		320,000
	Financial Assurance required by State DEQ		
	Estimated amount based on formula that is specified by DEQ		
12-4204-5810-00	Payment of Unemployment Claims		10,000
	Estimated Amount		

8-Nov Subtotal 839,892

DEPARTMENT LANDFILL		DEPARTMENT CODE	12-4204
EXPENDITURE LINE ITEM	DESCRIPTION	DETAIL AMOUNT	TOTAL AMOUNT (PER LINE ITEM)
12-4204-8003-00	Communication Equipment		15,000
	Funded at a minimum amount to replace radios as needed		
12-4204-8005-00	Motor Vehicles and Equipment		35,000
	New F-150 Crew 4x4	35,000	
12-4204-8006-00	Construction Vehicles and Equipment		630,000
	35 ton Articulated off road truck	600,000	
	Fork Lift - to replace unit @ convenience center	30,000	
12-4204-8007-00	Integrated Technology Equipment (A.D.P.)		5,000
	Funded at minimum to replace equipment as needed		
12-4204-8009-00	Miscellaneous (Landfill)		25,000
	New tools for shop	10,000	
	New GEM gas meter	15,000	
12-4204-8009-01	Miscellaneous Equipment - Generators (Gas to Energy)		10,000
	New specialty tools for gas plant	10,000	

8-Nov Subtotal 720,000

2018-2019 BUDGET INFORMATION - EXPENDITURES **LANDFILL** DEPARTMENT **DEPARTMENT CODE** 12-4204 **EXPENDITURE DETAIL TOTAL AMOUNT** LINE ITEM **AMOUNT** (PER LINE ITEM) **DESCRIPTION** 12-4204-8900-00 Improvements Other Than 1,345,000 Expand HHW Building 80,000 Stormwater Improvements - Landfill Entrance 200,000 Leachate Aeration Upgrade 15,000 Block replacement & control upgrade for 2 Jenbacher engines 900,000 Gas Wellfield Expansion 150,000 Extend gas collection header and add additional horizontal collectors in active cell. Gas collection system for CDD Landfill. 12-4204-9001-00 Lease/Rent Equipment 40,000 1,385,000 Subtotal **Total Expenditures** 5,594,520

2018-2019 CAPITAL REQUESTS

EXPENDITURE		DETAIL	TOTAL AMOUNT
LINE ITEM	DESCRIPTION	AMOUNT	TOTAL AMOUN (PER LINE ITEM
12-4204-8003-00	Communication Equipment		15,000
	Funded at a minimum amount to replace radios as needed		
12-4204-8005-00	Motor Vehicles and Equipment		35,000
	New F-150 Crew 4x4	35,000	
12-4204-8006-00	Construction Vehicles and Equipment		630,000
	35 Ton Articultated offroad truck	600,000	
	Fork Lift - to replace unit @ convenience center	30,000	
12-4204-8007-00	Integrated Technology Equipment (A.D.P.)		5,000
12-4204-8009-00	Miscellaneous (Landfill)		25,000
	New tools for shop	10,000	
	New GEM gas meter	15,000	
12-4204-8009-01	Miscellaneous Equipment - Generators (Gas to Energy)		10,000
	New specialty tools for gas plant		
7.11.		Ochtotal	700.000

7-Nov **Subtotal 720,000**

2018-2019 CAPITAL REQUESTS DEPARTMENT LANDFILL 12-4204 **DEPARTMENT CODE TOTAL AMOUNT EXPENDITURE** DETAIL **AMOUNT** (PER LINE ITEM) LINE ITEM **DESCRIPTION** 12-4204-8900-00 Improvements Other Than 1,345,000 80,000 Expand HHW Building Stormwater Improvements - Landfill Entrance 200,000 Leachate Aeration Upgrade 15,000 Block Replacement & Control upgrade for 2 Jenbacher engines 900,000 Gas Wellfield Expansion 150,000 Extend gas collection header and add additional horizontal collectors in active cell. Gas collection system for CDD Landfill. Lease/Rent Equipment 12-4204-9001-00 40,000

7-Nov Subtotal 1,385,000 **Total 2,105,000**