



Solid Waste Program Overview and Status

City Council Regular Meeting: March 22, 2021

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Solid Waste Program Overview and Status

- Air curtain burner brush disposal
- Citizen Convenience Center changes
- Curbside bulk pickup
- Curbside brush pickup
- Leaf collection

Air Curtain Burner Brush Disposal

- Staff proposes the following for brush disposal:
 - Obtain IEPA permit and implement air curtain burner disposal
 - Discontinue using a private vendor for brush disposal



Air Burner Annual Savings

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	TOTAL
Initial Cost:							
Machine Cost	\$124,757	\$0	\$0	\$0	\$0	\$0	\$124,757
Ash Rake	\$2,500						
Unloading Cost	\$600	\$0	\$0	\$0	\$0	\$0	
Training	\$800	\$0	\$0	\$0	\$0	\$0	
Fencing	\$35,000	\$0	\$0	\$0	\$0	\$0	\$35,000
Total	\$163,657	\$0	\$0	\$0	\$0	\$0	\$163,657
Operating Costs:							
Fuel	\$0	\$5,005	\$5,005	\$5,005	\$5,005	\$5,005	\$25,025
Porta Potty	\$0	\$500	\$500	\$500	\$500	\$500	
Ash Disposal	\$0	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000
500-Hour Maintenance	\$0	\$1,280	\$1,280	\$1,280	\$1,280	\$1,280	\$6,400
Total	\$0	\$8,785	\$8,785	\$8,785	\$8,785	\$8,785	\$43,925
Total Costs	\$163,657	\$8,785	\$8,785	\$8,785	\$8,785	\$8,785	\$207,582
Total Annual Brush Disposal Budget	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Total Tub Grinder Budget	\$460,000	\$0	\$0	\$0	\$0	\$0	
Annual Savings	\$296,343	\$291,215	\$291,215	\$291,215	\$291,215	\$291,215	\$1,292,418



Citizen Convenience Center Changes

- Stopped using bulk roll-off containers at the Citizen Convenience Center
- Several changes to address non-user abuse for bulk & brush
 - Implemented mapping system to ensure address is include
 - Began using driver's license / ID reader
 - Started tracking materials through PublicStuff
 - User information, number of loads, types of vehicles, photos of waste
 - Following code, enacted restrictions on contractor vehicles



Citizen Convenience Center Changes

- On a trial basis, staff proposes the following to further address non-user abuse
 - Disallow box trucks, enclosed trailers, dump trailers, and open trailers longer than 8 feet for bulk and brush
 - Accept two free allowable vehicles per month and charge \$25 per bucket for more than two allowable vehicles per month for bulk
 - Require proof of a City homeowner permit to drop off remodeling debris

Bulk CCC Non-User Abuse Annual Savings

Vehicle Cost:	Avg. Disposal Cost / Use	Avg. Uses / Month	Avg. Disposal Cost / Month	TOTAL
Box Truck	\$27.15	23	\$624.45	\$7,493.40
Enclosed Trailer	\$27.15	15	\$407.25	\$4,887.00
Open Trailer Greater than 8 Feet Long	\$13.58	118	\$1,602.44	\$19,229.28
Total			\$2,634.14	\$31,609.68
Frequency Cost:	Avg. Disposal Cost / Use	Avg. Uses / Month	Avg. Disposal Cost / Month	TOTAL
Remove Uses Greater than 2 / month / user	\$6.79	85.28	\$579.05	\$6,948.61
Total				\$6,948.61
Annual Savings				\$38,558.29
Use				\$39,000.00

Brush CCC Non-User Abuse

Vehicle Cost:	Avg. Disposal Cost / Use	Avg. Uses / Month	Avg. Disposal Cost / Month	TOTAL
Box Truck	\$33.33	1	\$33.33	\$399.96
Enclosed Trailer	\$33.33	0	\$0.00	\$0.00
Open Trailer Greater than 8 Feet Long	\$16.67	18	\$300.06	\$3,600.72
Total			\$333.39	\$4,000.68
Annual Savings				\$4,000.68
Use				\$4,000.00



Curbside Bulk Pickup

- Eliminate spring and fall curbside pickup
 - May 2021 bulk pickup will occur
- Increase hours at the Citizen Convenience Center
- Continue charging for curbside bulk pickup
 - Determine full cost recovery and adjust fees if needed
- Adjust collection frequency
 - Periodic bulk pickup (i.e. not every other week)
 - On-demand bulk pickup (electronic routing/work order system)

Spring and Fall Curbside Pickup Additional Costs

Total Summer Pickup Additional Labor and Equipment Costs	\$57,262.11
Total Fall Pickup Additional Labor and Equipment Costs	\$62,887.09
Total Additional Labor and Equipment Costs	\$120,149.20
Total Summer Pickup Disposal Cost	\$112,081.78
Total Fall Pickup Disposal Cost	\$47,167.36
Total Bi-Weekly Disposal Cost (4 Weeks)	\$47,905.14
Total Additional Disposal Cost	\$111,344.00
Annual Additional Cost	\$231,493.19
Use	\$231,000.00

Curbside Bulk Pickup

- Waste ordinance violations
- Commit to staying on schedule
- Examine changing collection areas for bulk





Curbside Brush Pickup

- Adjust collection frequency
 - Periodic brush pickup (i.e. not every other week)
 - Seasonal brush pickup (i.e. not in winter months, etc.)
 - Special collections for storms
 - Potential for General Fund reimbursement
- Brush / limb pickup rules
- Waste placement ordinance enforcement
- Commit to staying on schedule
- Examine changing collection areas for brush

Storm Cleanup Annual Savings

Crew Labor Costs	Hourly Rate	Total Comp.	Hours	Workers	Days	TOTAL
Heavy Operator	\$39.72	\$60.77	8	4	20	\$38,893.82
Truck Driver	\$32.05	\$49.04	8	8	20	\$62,766.72
Laborer	\$26.32	\$40.27	8	4	20	\$25,772.54
Total						\$127,433.09
Knuckleboom Labor Costs	Hourly Rate	Total Comp.	Hours	Workers	Days	TOTAL
Heavy Operator	\$39.72	\$60.77	8	1	20	\$9,723.46
Laborer	\$26.32	\$40.27	8	1	20	\$526.40
Total						\$10,249.86
Crew Equipment Costs	Hourly Rate		Hours	Vehicles	Days	TOTAL
Dump Truck	\$38.00		8	12	20	\$72,960.00
Loader	\$65.00		8	4	20	\$41,600.00
Total						\$114,560.00
Knuckleboom Equipment Costs	Hourly Rate		Hours	Vehicles	Days	TOTAL
Knuckleboom	\$95.00		8	1	20	\$15,200.00
Total						\$15,200.00
Total Labor Costs						\$137,682.94
Total Equipment Costs						\$129,760.00
Annual Savings						\$267,442.94
Use						\$267,000.00



Leaf Collection and Drop-off

Possible Changes

- Require that leaves be placed in biodegradable paper bags at the curb during peak leaf collection
- Set specific dates for peak leaf collection
- Suspend brush and bulk pickup during peak leaf collection
- Promote composting and mulching as an alternative to curbside collection

Benefits

- Improves safety and efficiency
- Reduces gutter and inlet clogging
- Eliminates the need to purchase leaf vacuums
- Makes it easier for users to know when leaves should be set out
- Composting and mulching reduces amount of leaves at the curb

Curbside Leaf Collection Annual Savings

Labor Savings:	Hourly Rate	Total Comp.	Hours	Workers	Days	TOTAL
Streets and Sewers Truck Driver	\$32.05	\$49.04	8	3	30	\$35,306.28
Seasonal Laborers	\$10.00	\$15.30	8	13	30	\$47,736.00
Truck Driver Overtime	\$48.08	\$65.07	8	37	4	\$77,038.74
Total						\$160,081.02
Equipment Purchase Savings:						
Leaf Vacuum	\$70,000.00					\$70,000.00
Total						\$70,000.00
Annual Savings						\$230,081.02
Use						\$230,000.00



Questions / Discussion