

2019 Pierce County Waste Characterization Study Results

420,450 tons		Aggregate			Single Family Residential			Multifamily Residential			Residential Self Haul			Commercial			Commercial Self Haul			Efficiency		
Cat.	No. Material Categories	90% Confidence Interval			90% Confidence Interval			90% Confidence Interval			90% Confidence Interval			90% Confidence Interval			90% Confidence Interval			90% Confidence Interval		
		% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound	% Comp.	Lower Bound	Upper Bound
Paper																						
	1 Newspaper	0.05%	0.04%	0.07%	0.03%	0.01%	0.04%	0.15%	0.05%	0.32%	0.00%	N/A	N/A	0.06%	0.02%	0.10%	0.00%	N/A	N/A	0.17%	0.04%	0.41%
	2 Cardboard & Kraft Paper	4.08%	3.22%	5.04%	1.34%	0.97%	1.77%	2.56%	1.81%	3.44%	5.31%	2.30%	9.47%	6.45%	3.90%	9.58%	7.41%	1.86%	16.21%	2.49%	1.52%	3.70%
	3 Paperboard	0.58%	0.46%	0.72%	0.39%	0.25%	0.56%	1.39%	1.00%	1.84%	0.00%	N/A	N/A	1.29%	0.72%	2.03%	0.00%	N/A	N/A	1.00%	0.32%	2.06%
	4 Magazine/Catalogs	0.19%	0.14%	0.25%	0.08%	0.04%	0.12%	0.49%	0.19%	0.93%	0.00%	N/A	N/A	0.20%	0.10%	0.33%	0.00%	N/A	N/A	0.37%	0.10%	0.82%
	5 Cartons and Coated Paperboard	0.67%	0.54%	0.82%	0.76%	0.56%	0.99%	1.18%	0.69%	1.78%	0.05%	0.01%	0.10%	1.28%	0.65%	2.13%	0.00%	N/A	N/A	0.62%	0.33%	1.00%
	6 Aseptic Packages	0.17%	0.12%	0.23%	0.22%	0.12%	0.36%	0.87%	0.27%	1.80%	0.00%	N/A	N/A	0.01%	0.01%	0.02%	0.00%	N/A	N/A	0.02%	0.00%	0.05%
	7 Mixed Recyclable Paper	2.61%	2.13%	3.13%	2.98%	2.26%	3.80%	3.88%	2.41%	5.68%	0.84%	0.26%	1.74%	2.17%	1.35%	3.19%	0.47%	0.12%	1.04%	4.79%	2.38%	7.97%
	8 Contaminated Paper	15.46%	13.37%	17.67%	22.41%	20.68%	24.19%	18.87%	14.81%	23.29%	6.31%	1.96%	12.89%	13.87%	10.26%	17.94%	1.49%	0.42%	3.20%	22.08%	18.44%	25.95%
	9 Other Non-Recyclable Paper	0.29%	0.20%	0.38%	0.07%	0.04%	0.10%	0.09%	0.03%	0.19%	0.00%	N/A	N/A	0.89%	0.33%	1.73%	0.00%	N/A	N/A	0.18%	0.02%	0.47%
	Total Paper	24.10%	21.47%	26.83%	28.28%	26.50%	30.09%	29.49%	26.28%	32.79%	12.50%	5.32%	22.16%	26.23%	22.17%	30.50%	9.36%	2.77%	19.29%	31.72%	26.58%	37.10%
Plastic																						
	10 Pop and Water Bottles	0.89%	0.75%	1.05%	0.66%	0.55%	0.77%	1.58%	1.28%	1.91%	1.16%	0.45%	2.19%	0.78%	0.52%	1.09%	0.02%	0.01%	0.04%	1.39%	0.74%	2.24%
	11 All other Bottles and Jugs	0.63%	0.52%	0.75%	0.79%	0.62%	0.98%	1.00%	0.78%	1.25%	0.02%	0.00%	0.03%	1.01%	0.64%	1.46%	0.00%	N/A	N/A	0.80%	0.39%	1.36%
	12 Compatible Plastic Containers	0.31%	0.24%	0.39%	0.50%	0.34%	0.70%	0.24%	0.13%	0.38%	0.36%	0.11%	0.76%	0.17%	0.11%	0.26%	0.21%	0.05%	0.46%	0.20%	0.11%	0.31%
	13 Non-Compatible Plastics	4.77%	4.10%	5.48%	5.49%	4.77%	6.26%	5.22%	4.62%	5.86%	0.65%	0.24%	1.26%	7.69%	5.35%	10.40%	1.89%	0.80%	3.43%	4.98%	3.74%	6.38%
	14 StyrofoamTM	0.88%	0.69%	1.10%	0.63%	0.49%	0.79%	0.57%	0.44%	0.72%	0.18%	0.06%	0.36%	0.72%	0.39%	1.15%	0.23%	0.06%	0.52%	0.79%	0.34%	1.41%
	15 Plastic Shopping Bags	0.15%	0.12%	0.19%	0.25%	0.18%	0.33%	0.19%	0.11%	0.30%	0.00%	N/A	N/A	0.14%	0.08%	0.21%	0.00%	N/A	N/A	0.19%	0.07%	0.37%
	16 Plastic Film	6.17%	5.38%	7.00%	7.13%	6.34%	7.97%	7.29%	5.72%	9.04%	1.55%	0.80%	2.54%	8.30%	5.70%	11.33%	2.91%	1.29%	5.15%	8.43%	6.04%	11.18%
	Total Plastic	13.81%	12.37%	15.31%	15.46%	14.22%	16.74%	16.11%	13.99%	18.34%	3.92%	2.23%	6.06%	18.80%	14.64%	23.36%	5.25%	3.03%	8.04%	16.78%	13.86%	19.91%
Glass																						
	17 Clear Glass	1.59%	1.31%	1.90%	2.31%	1.79%	2.89%	2.25%	1.70%	2.86%	0.34%	0.11%	0.71%	0.91%	0.54%	1.39%	1.68%	0.46%	3.65%	2.05%	1.01%	3.44%
	18 Brown Glass	0.53%	0.42%	0.65%	0.86%	0.60%	1.16%	0.65%	0.35%	1.04%	0.02%	0.01%	0.04%	0.39%	0.21%	0.62%	0.00%	N/A	N/A	0.65%	0.26%	1.20%
	19 Green Glass	0.34%	0.27%	0.43%	0.73%	0.50%	1.01%	0.39%	0.17%	0.69%	0.00%	N/A	N/A	0.11%	0.05%	0.20%	0.00%	N/A	N/A	0.54%	0.20%	1.05%
	20 Other Glass	0.49%	0.37%	0.63%	0.64%	0.40%	0.94%	0.27%	0.12%	0.48%	0.00%	N/A	N/A	0.31%	0.15%	0.53%	0.00%	N/A	N/A	0.21%	0.05%	0.47%
	Total Glass	2.95%	2.46%	3.49%	4.53%	3.71%	5.44%	3.56%	2.78%	4.42%	0.36%	0.12%	0.75%	1.72%	1.07%	2.52%	1.68%	0.46%	3.65%	3.44%	2.24%	4.88%
Metal																						
	21 Steel Cans	0.52%	0.42%	0.64%	0.55%	0.44%	0.66%	0.82%	0.55%	1.13%	0.00%	N/A	N/A	0.27%	0.15%	0.43%	1.24%	0.35%	2.67%	0.34%	0.22%	0.49%
	22 Aluminum Cans	0.81%	0.67%	0.97%	0.75%	0.60%	0.93%	0.98%	0.61%	1.42%	0.86%	0.31%	1.68%	0.91%	0.55%	1.36%	0.22%	0.06%	0.48%	0.40%	0.24%	0.59%
	23 Aerosol Cans	0.15%	0.12%	0.19%	0.31%	0.21%	0.43%	0.12%	0.06%	0.20%	0.00%	N/A	N/A	0.19%	0.09%	0.32%	0.00%	N/A	N/A	0.08%	0.02%	0.16%
	24 Large Appliances	0.83%	0.56%	1.16%	0.00%	N/A	N/A	0.00%	N/A	N/A	3.58%	0.89%	7.99%	0.00%	N/A	N/A	3.52%	0.97%	7.58%	0.00%	N/A	N/A
	25 Other Ferrous Metals	1.29%	0.99%	1.63%	1.04%	0.68%	1.47%	0.53%	0.31%	0.81%	0.03%	0.01%	0.06%	2.41%	1.34%	3.79%	3.25%	0.86%	7.10%	1.30%	0.40%	2.68%
	26 Other Non-Ferrous Metals	0.75%	0.58%	0.94%	0.66%	0.47%	0.87%	0.59%	0.40%	0.82%	2.28%	0.73%	4.66%	0.56%	0.31%	0.87%	0.39%	0.10%	0.87%	0.33%	0.11%	0.69%
	Total Metal	4.35%	3.54%	5.24%	3.30%	2.79%	3.86%	3.04%	2.53%	3.58%	6.75%	2.42%	13.05%	4.34%	2.90%	6.06%	8.63%	2.60%	17.70%	2.45%	1.60%	3.48%
Organics																						
	27 Food Waste: Edible/Program Compatible	2.17%	1.76%	2.63%	3.45%	2.74%	4.22%	2.88%	1.91%	4.04%	0.04%	0.01%	0.09%	3.19%	1.72%	5.09%	0.00%	N/A	N/A	2.22%	1.20%	3.54%
	28 Food Waste: Edible/Non-Compatible	7.02%	5.88%	8.26%	9.70%	8.11%	11.41%	9.07%	6.92%	11.48%	0.81%	0.24%	1.72%	7.89%	5.18%	11.12%	0.00%	N/A	N/A	10.75%	6.88%	15.37%
	29 Food Waste: Inedible/Compatible	1.53%	1.20%	1.90%	2.34%	1.63%	3.17%	1.14%	0.65%	1.77%	0.00%	N/A	N/A	3.08%	1.54%	5.12%	0.00%	N/A	N/A	1.19%	0.56%	2.06%
	30 Food Waste: Inedible/Non-Compatible	0.61%	0.46%	0.77%	0.83%	0.56%	1.16%	0.90%	0.38%	1.64%	0.00%	N/A	N/A	1.17%	0.55%	2.01%	0.00%	N/A	N/A	0.42%	0.09%	0.99%
	31 K-Cups	0.17%	0.14%	0.22%	0.29%	0.21%	0.39%	0.13%	0.08%	0.20%	0.00%	N/A	N/A	0.17%	0.08%	0.29%	0.00%	N/A	N/A	0.31%	0.10%	0.63%
	32 Yard Waste	5.47%	4.07%	7.08%	5.36%	3.78%	7.21%	2.36%	1.01%	4.26%	15.47%	5.47%	29.34%	2.75%	1.27%	4.77%	5.56%	0.68%	14.71%	6.24%	2.09%	12.40%
	33 Land Clearing Debris	0.08%	0.06%	0.11%	0.23%	0.11%	0.39%	0.10%	0.03%	0.22%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
	34 Other Organic Waste	3.12%	2.36%	3.98%	4.19%	3.00%	5.57%	1.98%	0.99%	3.30%	0.00%	N/A	N/A	4.88%	1.83%	9.29%	0.00%	N/A	N/A	3.29%	1.16%	6.45%
	Total Organics	20.18%	17.16%	23.37%	26.38%	24.02%	28.82%	18.56%	14.69%	22.78%	16.33%	5.88%	30.67%	23.12%	15.73%	31.46%	5.56%	0.68%	14.71%	24.43%	20.31%	28.79%
C&D Waste																						
	35 Gypsum Wallboard	1.98%	1.38%	2.68%	0.23%	0.11%	0.38%	0.38%	0.11%	0.83%	9.10%	3.31%	17.37%	0.00%	N/A	N/A	5.55%	1.48%	11.99%	1.72%	0.24%	4.52%
	36 Concrete	0.54%	0.37%	0.74%	0.15%	0.07%	0.25%	0.16%	0.05%	0.35%	3.04%	0.80%	6.65%	0.19%	0.07%	0.38%	0.00%	N/A	N/A	0.08%	0.01%	0.21%
	37 Insulation	0.78%	0.49%	1.14%	0.40%	0.19%	0.67%	0.00%	0.00%	0.01%	0.53%	0.18%	1.08%	0.00%	N/A	N/A	0.04%	0.01%	0.10%	0.00%	N/A	N/A
	38 Carpet	1.27%	0.88%	1.72%	0.26%	0.13%	0.44%	0.00%	N/A	N/A	5.21%	1.83%	10.19%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.09%	0.01%	0.25%
	39 Untreated Lumber	5.26%	3.82%	6.90%	0.46%	0.29%	0.66%	1.10%	0.46%	2.01%	11.24%	4.58%	20.35%	3.44%	1.52%	6.08%	23.36%	8.88%	42.12%	0.08%	0.02%	0.18%
	40 Treated Wood Waste	2.61%	1.95%	3.37%	1.13%	0.65%	1.74%	1.59%	0.60%	3.04%	3.73%	1.54%	6.82%	4.74%	2.11%	8.36%	6.55%	2.16%	13.09%	1.09%	0.28%	2.43%
	41 Asphalt Roofing	1.60%	1.06%	2.25%	0.36%	0.18%	0.59%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.42%	0.15%	0.84%	13.31%	3.35%	28.46%	0.00%	N/A	N/A
	42 Pallets	0.24%	0.17%	0.33%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.32%	0.10%	0.68%	0.42%	0.15%	0.82%	1.26%	0.34%	2.73%	0.00%	N/A	N/A
	43 Other Construction Debris	0.78%	0.54%	1.05%	0.43%	0.22%	0.72%	0.30%	0.08%	0.66%	0.00%	N/A	N/A	0.12%	0.05%	0.22%	5.62%	1.70%	11.61%	0.00%	N/A	N/A
	44 Asphalt	0.03%	0.02%	0.04%	0.02%	0.01%	0.04%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
	Total C&D Waste	15.08%	11.53%	19.02%	3.44%	2.24%	4.87%	3.54%	1.87%													

Hazardous Waste																					
45 Paints/Adhesives	0.31%	0.22%	0.42%	0.07%	0.04%	0.11%	0.02%	0.01%	0.04%	1.53%	0.44%	3.27%	0.01%	0.00%	0.03%	0.79%	0.20%	1.78%	0.08%	0.01%	0.21%
46 Cleaners	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
47 Pesticides/Herbicides	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
48 Vehicle & Equipment Fluids	0.01%	0.01%	0.02%	0.00%	N/A	N/A	0.12%	0.03%	0.25%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
49 Car Batteries	0.04%	0.02%	0.05%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.21%	0.07%	0.43%	0.00%	N/A	N/A	0.08%	0.02%	0.18%	0.00%	N/A	N/A
50 Alkaline Batteries	0.02%	0.02%	0.03%	0.05%	0.03%	0.08%	0.01%	0.00%	0.02%	0.00%	N/A	N/A	0.02%	0.01%	0.03%	0.00%	N/A	N/A	0.00%	N/A	N/A
51 Other Batteries	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.01%	0.00%	0.02%	0.00%	N/A	N/A	0.08%	0.01%	0.21%
52 Fluorescent Light Tubes & Compacts	0.01%	0.01%	0.02%	0.03%	0.02%	0.06%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.01%	0.00%	0.01%	0.00%	N/A	N/A	0.00%	N/A	N/A
53 Gasoline	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
54 Explosives	0.01%	0.00%	0.01%	0.02%	0.01%	0.03%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
55 Medical Waste	0.01%	0.01%	0.02%	0.01%	0.01%	0.02%	0.00%	0.00%	0.01%	0.00%	N/A	N/A	0.03%	0.01%	0.05%	0.00%	N/A	N/A	0.01%	0.00%	0.02%
56 Medicine (Rx Only)	0.01%	0.01%	0.01%	0.02%	0.01%	0.04%	0.01%	0.00%	0.03%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
57 E-Cycle Program	0.09%	0.06%	0.12%	0.05%	0.02%	0.08%	0.63%	0.17%	1.39%	0.00%	N/A	N/A	0.04%	0.02%	0.08%	0.00%	N/A	N/A	0.00%	N/A	N/A
58 All Other E-Waste	0.20%	0.15%	0.27%	0.35%	0.20%	0.55%	0.08%	0.03%	0.16%	0.00%	N/A	N/A	0.22%	0.09%	0.40%	0.00%	N/A	N/A	0.26%	0.03%	0.70%
59 Other Hazardous Waste	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
Total Hazardous Waste	0.72%	0.54%	0.93%	0.62%	0.40%	0.89%	0.87%	0.33%	1.69%	1.74%	0.55%	3.59%	0.34%	0.17%	0.56%	0.87%	0.24%	1.91%	0.42%	0.08%	1.02%
Other Waste																					
60 Tires	0.72%	0.50%	0.97%	0.00%	N/A	N/A	0.00%	N/A	N/A	1.55%	0.54%	3.08%	0.00%	N/A	N/A	4.93%	1.77%	9.55%	0.00%	N/A	N/A
61 Mattresses/Box Springs	0.85%	0.59%	1.16%	0.00%	N/A	N/A	0.00%	N/A	N/A	5.66%	2.16%	10.69%	0.00%	N/A	N/A	1.17%	0.33%	2.51%	0.00%	N/A	N/A
62 Furniture/Bulky	1.88%	1.24%	2.65%	0.00%	N/A	N/A	0.00%	N/A	N/A	14.60%	4.75%	28.63%	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A
63 Small Appliances	0.86%	0.62%	1.15%	0.47%	0.25%	0.75%	0.31%	0.12%	0.59%	0.44%	0.13%	0.92%	0.84%	0.35%	1.53%	4.28%	1.18%	9.20%	0.00%	N/A	N/A
64 Textiles and Leather	5.38%	4.35%	6.52%	5.34%	4.15%	6.67%	10.47%	6.87%	14.72%	2.50%	0.80%	5.12%	6.21%	3.21%	10.12%	2.59%	0.61%	5.89%	5.15%	2.66%	8.40%
65 Diapers	3.36%	2.72%	4.06%	5.46%	4.33%	6.71%	5.36%	3.42%	7.71%	0.03%	0.01%	0.07%	2.23%	1.20%	3.57%	0.00%	N/A	N/A	5.08%	2.01%	9.44%
66 All Other Waste	3.68%	3.07%	4.34%	3.96%	3.25%	4.74%	6.49%	4.39%	8.95%	0.20%	0.07%	0.40%	3.52%	2.25%	5.08%	0.00%	N/A	N/A	5.62%	4.07%	7.40%
67 Liquids	1.29%	1.06%	1.55%	1.22%	0.94%	1.55%	1.94%	1.34%	2.65%	0.18%	0.05%	0.37%	2.05%	1.29%	2.98%	0.00%	N/A	N/A	0.86%	0.45%	1.41%
68 Fines	0.76%	0.61%	0.92%	1.24%	0.90%	1.62%	0.83%	0.46%	1.29%	0.07%	0.02%	0.15%	1.26%	0.80%	1.82%	0.00%	N/A	N/A	1.00%	0.74%	1.30%
Total Other Waste	18.78%	16.15%	21.56%	17.69%	15.61%	19.87%	25.39%	21.44%	29.55%	25.23%	10.80%	43.24%	16.12%	11.20%	21.74%	12.96%	5.23%	23.47%	17.71%	13.14%	22.79%
Total	99.97%			99.70%			100.55%			100.00%			100.00%			100.00%			100.00%		