WASTE MANAGEMENT

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January 9, 2004

Carole J. Washburn, Executive Secretary
Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

Re: Submittal of Reports

Dear Ms. Washburn:

Attached are the third quarter of 2003 reports that were required by TG-030711, 030712, 030713 and 030923. As you know, we are delinquent in our submittal of these reports and we again apologize for this fact. As the Commission will see from these reports, the amount of material collected from curbside recycling has increased with the implementation of our new single-stream recycling program and we are very excited about these results.

If you have any questions, please do not hesitate to give me a call at 206/254-3075. Thank you again for your patience in regards to this matter.

Very truly yours,

Mike Weinstein
Senior Financial Analyst

COPY TO NICKI JOHNSON

Waste Management - Sno-King(King County North)

3rd Quarter 2003 Waste Stream Summary Report

TONS COLLECTED	Baseline Data	2003 July	2003 August	2003 September	Average TOTAL
RESIDENTIAL WASTE STREAM					
Residential Recycling:	770.05	862.76	783.97	901.77	849.50
Mix Paper	376.00	409.57	372.16	428.09	403.27
Newspaper	153.56	241.62	219.56	252.55	237.91
Aluminum	9.93	8.84	8.03	9.24	8.70
Glass	191.63	141.47	128.55	147.87	139.30
PET	6.28	5.02	4.56	5.25	4.94
HDPE	7.41	7.42	6.75	7.76	7.31
Tin Cans	25.23	8.47	7.69	8.85	8.34
Residue	N/A	40.35	36.66	42.17	39.73
Residential Yard Waste	N/A	598.96	372.68	487.07	486.23
Residential Solid Waste	1,791.63	1,860.59	1,640.31	1,682.09	1,727.66
TOTAL RESIDENTIAL	*2,561.68*	*3,322.31*	*2,796.96*	*3,070.93*	*3,063.40*
MULTI-FAMILY WASTE STREAM					
Multi-Family Recycling	N/A	12.05	10.60	11.13	11.26
Multi-Family Yard Waste	N/A	-	-	-	-
Multi-Family Solid Waste	N/A	114.58	112.31	95.12	107.34
TOTAL MULTI-FAMILY	N/A	*126.62*	*122.91*	*106.25*	*118.59*
TOTAL WASTE STREAM	*N/A*	*3,448.93*	*2,919.87*	*3,177.17*	*3,181.99*

PARTICIPATION STATISTICS					
Residential Curbside Recycling					
Total Customers	22,352	22,903	23,006	23,109	23,006
1-32gal Can Monthly	N/A	155	245	246	216
1-10gal Mini Can	N/A	-	170	171	114
1-20gal Mini Can	N/A	713	2,477	2,488	1,893
1-32gal Can	N/A	8,439	13,884	13,947	12,090
2-32gal Cans	N/A	1,460	2,296	2,307	2,021
3-32gal Cans	N/A	93	111	111	105
4-32gal Cans	N/A	4	15	15	11
5-32gal Cans	N/A	2	1	1	2
1 35 Gal Cart	N/A	2,285	1	1	762
1 64 Gal Cart	N/A	6,370	3,397	3,412	4,393
1 96 Gal Cart	N/A	3,382	409	410	1,400
Average Set-Out %	N/A	72.88%	64.13%	72.47%	69.83%
Average Lbs. Per Set-out	21.20	23.86	24.52	24.85	24.41
Residential Yard Waste					
Total Customers	N/A	8,886	8,883	8,893	8,887
Average Set-Out %	N/A	73.49%	68.41%	78.57%	73.49%
Average Lbs. Per Set-out	N/A	42.33	28.30	32.17	34.27
Multi-Family Recycling					
Total Customers	N/A	53	53	53	53
Cans	N/A	1	1	1	1
64 Gal Carts	N/A	-	-	-	-
96 Gal Carts	N/A	3	3	3	3
1 yard	N/A	-	-	-	-
1.5 yard	N/A	-	-	-	-
2 yard	N/A	4	4	4	4
3 yard	N/A	9	9	9	9
4 yard	N/A	8	8	8	8
6 yard	N/A	15	15	15	15
8 yard	N/A	13	13	13	13
20 yd comp	N/A	-	-	-	-
30 yd comp	N/A	-	-	-	-

WASTE STREAM DIVERSIONS					
Residential Waste Stream					
From Curbside Recycling	N/A	25.97%	28.03%	29.36%	27.79%
From Yard Waste	N/A	18.03%	13.32%	15.86%	10.45%
From all Residential Programs	N/A	44.00%	41.35%	45.23%	43.53%
Multi-Family Waste Stream					
From Multi-Family Recycling	N/A	9.51%	8.62%	10.47%	9.54%
From Multi-Family Yard Waste	N/A	0.00%	0.00%	0.00%	0.00%
From All Multi-Family Programs	N/A	9.51%	8.62%	10.47%	9.54%
TOTAL Residential/MF DIVERSION %	*N/A*	*42.73%*	*39.98%*	*44.06%*	*42.33%*
TOTAL Residential/MF DIVERSION(w/o Yard Waste) %	*30.06%*	*51.29%*	*45.41%*	*51.63%*	*49.55%*

Waste Management of Soutn Sound(King County South)

3rd Quarter 2003 Waste Stream Summary Report

TONS COLLECTED	Baseline Data	2003 July	2003 August	2003 September	Average TOTAL
RESIDENTIAL WASTE STREAM					
Residential Recycling:	1,023.15	895.53	978.16	1,093.64	989.11
Mix Paper	499.58	425.12	464.35	519.17	469.55
Newspaper	204.03	250.80	273.94	306.28	277.01
Aluminum	13.20	9.18	10.02	11.20	10.13
Glass	254.61	146.84	160.39	179.33	162.19
PET	8.35	5.21	5.69	6.37	5.76
HDPE	9.85	7.71	8.42	9.41	8.51
Tin Cans	33.53	8.79	9.60	10.73	9.71
Residue	N/A	41.88	45.74	51.14	46.26
Residential Yard Waste	N/A	925.77	724.89	692.68	781.11
Residential Solid Waste	2,143.75	2,456.04	2,187.53	2,319.84	2,321.14
TOTAL RESIDENTIAL	*3,166.90*	*4,277.35*	*3,890.58*	*4,106.16*	*4,091.36*
MULTI-FAMILY WASTE STREAM					
Multi-Family Recycling	N/A	46.45	40.38	56.56	47.80
Multi-Family Yard Waste	N/A	7.05	8.68	18.32	11.35
Multi-Family Solid Waste	N/A	757.50	697.07	968.18	807.58
TOTAL MULTI-FAMILY	N/A	*811.00*	*746.13*	*1,043.06*	*866.73*
TOTAL WASTE STREAM	*N/A*	*5,088.35*	*4,636.71*	*5,149.21*	*4,958.09*

PARTICIPATION STATISTICS					
Residential Curbside Recycling					
Total Customers	31,737	32,034	32,227	32,420	32,227
1-32gal Can Monthly	N/A	342	344	346	344
1-10gal Mini Can	N/A	237	238	240	238
1-20gal Mini Can	N/A	3,449	3,470	3,491	3,470
1-32gal Can	N/A	19,333	19,449	19,566	19,449
2-32gal Cans	N/A	3,198	3,217	3,236	3,217
3-32gal Cans	N/A	154	155	156	155
4-32gal Cans	N/A	20	21	21	21
5-32gal Cans	N/A	2	2	2	2
1 35 Gal Cart	N/A	1	1	1	1
1 64 Gal Cart	N/A	4,729	4,758	4,786	4,758
1 96 Gal Cart	N/A	569	572	576	572
Average Set-Out %	N/A	69.83%	79.83%	82.37%	77.34%
Average Lbs. Per Set-out	19.84	18.48	35.10	37.80	28.19
Residential Yard Waste					
Total Customers	N/A	11,962	11,962	11,962	11,962
Average Set-Out %	N/A	78.14%	64.23%	63.90%	68.75%
Average Lbs. Per Set-out	N/A	45.71	43.55	41.83	43.70
Multi-Family Recycling					
Total Customers	N/A	171	171	171	171
Cans	N/A	8	8	8	8
64 Gal Carts	N/A	1	1	1	1
96 Gal Carts	N/A	4	4	4	4
1 yard	N/A	14	14	14	14
1.5 yard	N/A	8	8	8	8
2 yard	N/A	26	26	26	26
3 yard	N/A	10	10	10	10
4 yard	N/A	45	45	45	45
6 yard	N/A	28	28	28	28
8 yard	N/A	27	27	27	27
20 yd comp	N/A	2	2	2	2
30 yd comp	N/A	9	9	9	9

WASTE STREAM DIVERSIONS					
Residential Waste Stream					
From Curbside Recycling	N/A	20.94%	25.14%	26.63%	24.24%
From Yard Waste	N/A	21.64%	18.63%	16.87%	13.43%
From all Residential Programs	N/A	42.58%	43.77%	43.50%	43.29%
Multi-Family Waste Stream					
From Multi-Family Recycling	N/A	5.73%	5.41%	5.42%	5.52%
From Multi-Family Yard Waste	N/A	0.87%	1.16%	1.76%	1.26%
From All Multi-Family Programs	N/A	6.60%	6.58%	7.18%	6.78%
TOTAL Residential/MF DIVERSION %	*N/A*	*36.85%*	*37.79%*	*36.15%*	*36.90%*
TOTAL Residential/MF DIVERSION(w/o Yard Waste) %	*32.31%*	*43.83%*	*43.63%*	*40.25%*	*42.50%*

Residential Commodity Sales Revenue

Waste Management of South Sound(King County South)

Commodity	% of Materials	Tonnage Jul	Aug	Sep	Total	July per ton	July Revenue	August per ton	August Revenue	September per ton	September Revenue	Total 3rd Quarter per ton	Total 3rd Quarter Revenue
Mix Paper	47.5%	425.12	464.35	519.17	1,408.64	$ 63.88	$ 27,157	$ 68.49	$ 31,803	$ 73.01	$ 37,904	$ 68.76	$ 96,865
Newspaper	28.0%	250.80	273.94	306.28	831.03	$ 70.23	17,614	$ 77.05	21,107	$ 80.00	24,503	$ 76.08	63,224
Aluminum	1.0%	9.18	10.02	11.20	30.40	$ 720.00	6,606	$ 759.63	7,613	$ 450.49	5,048	$ 633.73	19,267
Glass	16.4%	146.84	160.39	179.33	486.56	$ (5.00)	(734)	$ (5.00)	(802)	$ (5.00)	(897)	$ (5.00)	(2,433)
PET	0.6%	5.21	5.69	6.37	17.27	$ 327.33	1,706	$ 335.18	1,908	$ 329.30	2,096	$ 330.64	5,711
HDPE	0.9%	7.71	8.42	9.41	25.53	$ 171.95	1,325	$ 180.29	1,517	$ 183.92	1,731	$ 179.11	4,573
Tin Cans	1.0%	8.79	9.60	10.73	29.12	$ 24.10	212	$ 28.57	274	$ 28.57	307	$ 27.22	793
Residue	4.7%	41.88	45.74	51.14	138.77	$ (82.50)	(3,455)	$ (82.50)	(3,774)	$ (82.50)	(4,219)	$ (82.50)	(11,448)
	100.0%	**895.53**	**978.16**	**1,093.64**	**2,967.33**		**$ 50,431**		**$ 59,648**		**$ 66,472**		**$ 176,551**

Waste Management - Sno-King(King County North)

Commodity	% of Materials	Tonnage Jul	Aug	Sep	Total	July per ton	July Revenue	August per ton	August Revenue	September per ton	September Revenue	Total 3rd Quarter per ton	Total 3rd Quarter Revenue
Mix Paper	47.5%	409.57	372.16	428.09	1,209.82	$ 63.88	$ 26,163	$ 68.49	$ 25,489	$ 73.01	$ 31,255	$ 68.53	$ 82,907
Newspaper	28.0%	241.62	219.56	252.55	713.73	$ 70.23	16,969	$ 77.05	16,917	$ 80.00	20,204	$ 75.79	54,090
Aluminum	1.0%	8.84	8.03	9.24	26.11	$ 720.00	6,364	$ 759.63	6,101	$ 450.49	4,162	$ 636.83	16,628
Glass	16.4%	141.47	128.55	147.87	417.89	$ (5.00)	(707)	$ (5.00)	(643)	$ (5.00)	(739)	$ (5.00)	(2,089)
PET	0.6%	5.02	4.56	5.25	14.83	$ 327.33	1,644	$ 335.18	1,530	$ 329.30	1,729	$ 330.44	4,902
HDPE	0.9%	7.42	6.75	7.76	21.93	$ 171.95	1,276	$ 180.29	1,216	$ 183.92	1,427	$ 178.75	3,920
Tin Cans	1.0%	8.47	7.69	8.85	25.01	$ 24.10	204	$ 28.57	220	$ 28.57	253	$ 27.06	677
Residue	4.7%	40.35	36.66	42.17	119.18	$ (82.50)	(3,329)	$ (82.50)	(3,025)	$ (82.50)	(3,479)	$ (82.50)	(9,833)
	100.0%	**862.76**	**783.97**	**901.77**	**2,548.50**		**$ 48,585**		**$ 47,806**		**$ 54,811**		**$ 151,202**

Multi-Family Commodity Sales Revenue

Waste Management of South Sound(King County South)

Commodity	% of Materials	Tonnage Jul	Aug	Sep	Total	July per ton	July Revenue	August per ton	August Revenue	September per ton	September Revenue	Total 3rd Quarter per ton	Total 3rd Quarter Revenue
Mix Paper	47.5%	22.05	19.17	26.85	68.07	$ 63.88	$ 1,409	$ 68.49	$ 1,313	$ 73.01	$ 1,960	$ 68.78	$ 4,682
Newspaper	28.0%	13.01	11.31	15.84	40.16	$ 70.23	914	$ 77.05	871	$ 80.00	1,267	$ 76.00	3,052
Aluminum	1.0%	0.48	0.41	0.58	1.47	$ 720.00	343	$ 759.63	314	$ 450.49	261	$624.86	918
Glass	16.4%	7.62	6.62	9.27	23.51	$ (5.00)	(38)	$ (5.00)	(33)	$ (5.00)	(46)	$ (5.00)	(118)
PET	0.6%	0.27	0.24	0.33	0.83	$ 327.33	89	$ 335.18	79	$ 329.30	108	$330.32	276
HDPE	0.9%	0.40	0.35	0.49	1.23	$ 171.95	69	$ 180.29	63	$ 183.92	90	$179.02	221
Tin Cans	1.0%	0.46	0.40	0.56	1.41	$ 24.10	11	$ 28.57	11	$ 28.57	16	$ 27.12	38
Residue	4.7%	2.17	1.89	2.65	6.71	$ (82.50)	(179)	$ (82.50)	(156)	$ (82.50)	(218)	$ (82.50)	(553)
	100.0%	46.45	40.38	56.56	143.39		$ 2,616		$ 2,462		$ 3,438	$ 59.39	$ 8,516

Waste Management - Sno-King(King County North)

Commodity	% of Materials	Tonnage Jul	Aug	Sep	Total	July per ton	July Revenue	August per ton	August Revenue	September per ton	September Revenue	Total 3rd Quarter per ton	Total 3rd Quarter Revenue
Mix Paper	47.5%	5.72	5.03	5.28	16.03	$ 63.88	$ 365	$ 68.49	$ 345	$ 73.01	$ 386	$ 68.33	$ 1,096
Newspaper	28.0%	3.37	2.97	3.12	9.46	$ 70.23	237	$ 77.05	229	$ 80.00	249	$ 75.59	715
Aluminum	1.0%	0.12	0.11	0.11	0.35	$ 720.00	89	$ 759.63	82	$ 450.49	51	$643.64	223
Glass	16.4%	1.98	1.74	1.82	5.54	$ (5.00)	(10)	$ (5.00)	(9)	$ (5.00)	(9)	$ (5.00)	(28)
PET	0.6%	0.07	0.06	0.06	0.20	$ 327.33	23	$ 335.18	21	$ 329.30	21	$330.44	65
HDPE	0.9%	0.10	0.09	0.10	0.29	$ 171.95	18	$ 180.29	16	$ 183.92	18	$178.51	52
Tin Cans	1.0%	0.12	0.10	0.11	0.33	$ 24.10	3	$ 28.57	3	$ 28.57	3	$ 26.98	9
Residue	4.7%	0.56	0.50	0.52	1.58	$ (82.50)	(46)	$ (82.50)	(41)	$ (82.50)	(43)	$ (82.50)	(130)
	100.0%	12.05	10.60	11.13	33.77		$ 678		$ 646		$ 676	$ 59.25	$ 2,001

Waste Management of Washington

King County Unincorporated WUTC Areas

Cost to convert from 3-bin to Single Stream (cart based) Recycling

Cost per cart / customer

Cost of Cascade Recycling 96-gallon blue cart	$	39.25
Freight cost/cart from Cascade Engineering to WM sites	$	3.74
Customer education information (delivered with cart)	$	1.80
Delivery to curbside customers	$	2.65
Total Cost per cart / customer	**$**	**47.44**

Total Cost Calculations:

	# of Customers	Total Cost
King County		
Waste Management - Sno-King(King County North)	23,109	$ 1,096,300
Waste Management of South Sound(King County South)	32,420	$ 1,538,017
Total King County Cost	**55,529**	**$ 2,634,317**

King County

Complaint Log

Calls concerning Single Stream Program	**897**
Concerns about container size	
Container not delivered	
Questions about recycled items	
Confusion over every other week service	
Customers requesting carts to be removed	**99**

GREEN SOLUTIONS

MEMORANDUM

DATE: August 4, 2003

TO: Jeff Gaisford, Bill Reed, Jeff Brown, Jeff Morris, Jerry Hardebeck, Dean Kattler, Rob Van Orsow, and Sharon Conroy

FROM: Rick Hlavka

RE: Final Results from Sorting Recyclables before Single Stream

Attached are the results from sorting loads of recyclables from the Woodinville test area.

As you may recall, the first load in the first week had some commercial materials in it and so that load has not been included in the attached results. We also ran into a glitch in the second week, when the first load of recyclables didn't show up until 11:00 a.m. (instead of 8:00 - 8:30 a.m. as I had hoped). This not only prevented us from doing one of the four target loads, but we had to forgo half of the third load due to space and time constraints. While unfortunate, I don't believe this impairs the results.

I have to say that I'm glad we did two weeks worth of loads from the test area. We can look back on the data now and see that the results are fairly consistent, but we couldn't have had as much confidence in that if we hadn't collected enough data. And where the loads did vary somewhat was in the garbage and other materials present in small amounts. For those materials, it was best to do at least as much sorting as we did.

Note that this report contains the final data from the first round of sorting, but could be viewed as preliminary in that it won't be completed until we've had a chance to do the second round of sorting plus the associated analysis. The associated analysis should include adjustments for seasonal trends and comparison of composition and setout data as appropriate to other areas.

Please let me know if you have any comments or questions.

COMPOSITION ANALYSIS
SINGLE STREAM COLLECTION TEST

INTRODUCTION

King County and Waste Management have entered into an agreement that allows Waste Management to retain part of the increase in revenues from increased recycling quantities that may result from various improvements in the recycling programs. That agreement requires a composition analysis, and this report addresses the first half of that requirement.

APPROACH

To test the possible change in amount or types of materials being diverted through the switch to single stream recycling, Green Solutions has been retained, as a subcontractor to Sound Resource Management Group, to conduct two composition analyses of the recyclable materials collected in an area of Woodinville. This report addresses the first of these two tests - the "before" snapshot of the materials collected in the current system. A later test will look at the composition of the materials after single stream recycling is implemented in the test area. The single stream program will allow participants to place all recyclables in one container, and will also expand the list of materials that can be recycled.

The materials collected from two routes in Woodinville (Routes #723 and #729) on July 23 and 30 were delivered to a special area of Waste Management's existing Woodinville facility (at 6211 234th St. E). These materials would have normally gone to this facility anyway, but would have been dumped with other materials onto a tipping floor (for the paper) or into a large container (for the cans and bottles). Instead, the materials were dumped into temporary bunkers that had been set up adjacent to the receiving building for the paper. On July 23, 24, 30, and 31, a crew of temporary laborers sorted these loads under the supervision of Rick Hlavka (Green Solutions).

The paper loads were sorted by removing the cardboard, newspaper (newsprint only, no glossy ads or other extraneous materials), milk cartons/drink boxes/frozen food packaging, and garbage. These materials were placed into 32-gallon garbage cans and weighed, and then dumped where these could be pushed into the normal receiving area (the garbage was dumped elsewhere, not back in the paper). The mixed paper was pushed aside as the other materials were removed, and the weight of this material was determined by subtracting the combined weight of the other materials removed from the total weight of the paper (from the scale tickets).

A few of the loads were delivered to the facility with the mixed paper and newspaper separated, but most of the load had these two materials mixed. When the newspaper was delivered separately, it was very clean (free of contaminants) and did not require sorting. Instead, an estimate for the amount of glossy ads (which are mixed paper by the definitions used for this project) and garbage (a small amount of plastic film) was derived based on a visual examination. The newsprint-only definition (i.e., no glossy ads) used for this project is artificially strict but necessary due to the difficulty of distinguishing between glossy inserts and other glossy ads delivered separately. Restricting the criteria to newsprint-only will allow a comparable sort to be done later when all of the papers are mixed during home storage and curbside collection.

The cans and bottles portion of the load (TAG) was dumped onto a tarp and sorted into 11 categories. The materials were also sorted into 32-gallon trash cans and weighed, but were then dumped into the bucket of a front-end loader to be transported to the main receiving area for TAG. Additional notes were kept on the materials in the two garbage categories.

There was very little cross-contamination of TAG and paper. TAG that was found in the paper fraction was tossed into the TAG pile, and vice versa for the paper found in the TAG pile. This approach is consistent with the future analysis, where all materials will be mixed together and so it will not possible or appropriate to address cross-contamination issues. On the other hand, milk cartons were kept separate from each of the two fractions (interestingly, most of the milk cartons were found in the TAG fraction, not in the paper fraction).

Although the sampling and sorting efforts were conducted over a two-week period, this analysis still represents only one point in time, so the following data should be viewed with caution as the results may have been impacted by seasonal trends, random variations, or other factors. Some adjustments for seasonal trends may be possible at a later date, however, and the consistency of the results indicates that random variation is minimal.

RESULTS, COMPOSITION OF SAMPLES

Table 1 shows the results from sorting the paper and TAG fractions. Note that the TAG fractions from the second, third and fourth loads in the first week were combined in one pile due to space constraints, so separate data for the TAG from each of these loads is not available. In the second week, this situation was reversed by combining the paper fractions from the two loads tested and keeping the TAG fractions separate to provide data on the variability of the TAG's composition from individual loads. Table 1 also shows combined data for samples 6 and 7 because these were originally delivered separately, as mixed paper and newspaper, but have been combined here to provide data that is comparable to the other loads. The paper and TAG fractions from the first load in the first week were kept separate and are not included in this report because that load was "contaminated" by commercial materials.

In Table 1, the last column shows the breakdown for all samples combined. These figures are not a simple average of the results for each load, but were calculated by summing up the weights for all samples and then calculating the percentage figures. Note that Sample #15, the TAG fraction from the third load in the second week, is not included in this average because this was the only part of that load that was sorted and so including this sample would skew the results.

RESULTS ON A PER SETOUT BASIS

Table 2 shows the weight of materials collected on a per setout basis. Data on the number of setouts per load were provided by the Waste Management drivers at the time the loads were delivered.

Table 1: Composition of Samples, Percent by Weight

Fraction:	Paper Fraction					TAG Fraction					All
Sample #:[1]	4	6,7[2]	9	11, 13	Ave	5, 8, 10	12	14	15	Ave.	Samples
Newspaper	32.8	37.8	37.7	33.3	34.6						24.7
Cardboard	17.6	11.8	13.3	14.3	14.5						10.4
Milk Cartons, etc	0.1	0.1	0.1	0.1	0.11	0.2	0.1	0.6	0.2	0.27	0.2
Mixed Paper	49.5	50.1	48.5	52.1	50.6						36.1
PET Bottles						9.2	9.0	7.7	7.6	8.6	2.5
HDPE Bottles						5.3	5.8	5.3	4.8	5.3	1.5
Bottles 3-7						0.2	0.1	0.2	0.1	0.15	0.05
Tubs						0.4	0.6	0.3	0.3	0.37	0.11
Glass Bottles						73.4	73.6	74.5	77.5	74.3	21.1
Aluminum Cans						4.8	4.7	3.8	4.0	4.5	1.3
Tin Cans						4.7	3.6	3.4	3.2	4.0	1.2
Scrap Metal						0.1	0.2	0.3	0	0.12	0.04
Garbage, Plastic	0.01	0.1	0.1	0.1	0.06	1.3	1.6	2.6	1.1	1.6	0.53
Garbage, Other	0.1	0.02	0.3	0.1	0.11	0.3	0.9	1.4	1.2	0.77	0.28

Notes: All figures are percent by weight.
1. Sample numbers 1-10 are from first week, 11-15 are from second week.
2. Samples 6 (mixed paper) and 7 (newspaper) were originally delivered separately

Table 2: Setout Rates

Load #:	2	3	4	2-4	5	6	7	Total/Ave
Paper								
Pound	4,000	3,000	2,580	9,580	3,860	4,220	2,740	20,400
# of Setouts	230	190	170	590	220	260	170	1,240
Setout Rate	17.4	15.8	15.2	16.2	17.5	16.2	16.1	16.5
TAG								
Pounds	NA	NA	NA	3,894	1,444	1,735	1,185	8,257
# of Setouts				590	220	260	170	1,240
Pounds / Setout				6.6	6.6	6.7	7.0	6.7
Totals								
Total Pounds	NA	NA	NA	13,474	5,304	5,955	3,925	28,657
Total # Setouts				590	220	260	170	1,240
Total lb/Setout				22.8	24.1	22.9	23.1	23.1
% Paper				71.1%	72.8%	70.9%	69.8%	71.2%
% TAG				28.9%	27.2%	29.1%	30.2%	28.8%

A = Not Available. Data is not shown for TAG from the individual loads 2, 3 or 4 because an accurate total eight is not available for those loads (TAG for those loads was combined in one pile, and tare weights from the llection vehicles are not sufficiently accurate for this analysis).

ATTACHMENT A
SAMPLE DATA FORM
KING COUNTY / WASTE MANAGEMENT SORTING PROJECT

Sample #: _____ Load #: _____ Source: _____	Date: _____ Time: _____
	Number Set-outs: _____ Truck Type and Driver: _____ _____
Material: _____ Weight: _____ (from scale ticket)	

MATERIAL	WEIGHT	NOTES
ONP #8		
OCC		
Milk Cartons/Polycoat		
MSP		
PET Bottles		
HDPE Bottles		
Bottles 3-7		
Tubs		
Glass Bottles		
Aluminum Cans		
Tin Cans		
Scrap Metal		
Garbage, Plastic		Identify:
Garbage, Non-Plastic		Identify:

Notes: need to take pictures of incoming materials and at least some of the sorted materials.

Definitions for sorting categories:

ONP #8 = newspaper only, no glossy ads or similar colored/glossy paper.

OCC = cardboard (non-waxed) and paper grocery bags.

Milk Cartons/Polycoated = milk cartons, drink boxes, and frozen food packages.

MSP = all other types of paper.

PET Bottles = all types of PET bottles, including colored.

HDPE Bottles = all types of clear and colored HDPE bottles.

Bottles 3-7 = bottle types 3-7.

Tubs = non-bottle plastic containers.

Glass Bottles = all colors of glass bottles.

Aluminum Cans = aluminum cans.

Tin Cans = tin cans (including one or two bi-metal cans that were found).

Scrap Metal = all other metals except aluminum foil and aerosol cans.

Garbage, Plastic = non-recyclable types of plastic (non-recyclable per the local program's rules), including plastic film and bags, styrofoam containers, all types of plastic trays, cups, toys and other products. Also includes motor oil bottles and other containers for hazardous material.

Garbage, Non-Plastic = other types of non-recyclable materials, including aerosol cans, aluminum foil, food waste, non-recyclable paper, etc.