

To: Zero Waste Advisory Commission

From: Bob Gedert, Director

Austin Resource Recovery Department

Date: January 9, 2013

Subject: Director's Report

Diversion Measurement Challenges

Currently, the Department measures residential waste diversion through tonnage reports of city-hauled material. Our staff tracks tons of trash, recyclables and yard trimmings from our residential routes. We also track material flow through our HHW facility, and the semi-annual bulk and large brush pickup service. The calculation of residential diversion is simply the tons diverted away from the landfill divided by total tons generated.

This calculation makes two major assumptions: that this is a closed loop measurement system, and that there are no other non-tracked residential waste streams. This measurement is flawed as it does not measure waste reduction, back-yard composting, and the reduced generation of waste from the household. Thus, we have also relied on a secondary measure that tracks diversion through pounds per household per week.

However, the Council adopted Zero Waste goal refers to all waste streams generated within the City of Austin. The challenge is to reduce our landfilled waste from home, school, work, and play. This implies a larger measurement system to track residential, commercial, industrial, governmental and institutional waste diversion. The reporting requirements of the Universal Recycling Ordinance are intended to develop the tracking of waste and diversion flows throughout the entire city.

Through a detailed waste assessment study every five years of all waste streams, the Department will determine our progress toward our Zero Waste goal. The next juncture point for a detailed waste diversion study will be in 2015 and will occur every five years thereafter.

Historically, there have been inconsistencies and significant challenges when measuring waste reduction and diversion. In addition to the challenges of implementing diversion programs, there are also significant challenges in measuring progress toward diversion goals. Many states and cities have developed their own unique measurement systems, with population and economic growth calculations as well as unique "diversion credits". Because these systems are inconsistent and varied, there is no method to compare diversion rates amongst various jurisdictions.

I am working closely with the National Recycling Coalition (NRC), the State of Texas Alliance for Recyclers (STAR), the Texas Commission on Environmental Quality (TCEQ), and the US Environmental Protection Agency – Region 6 (EPA) toward identifying the best data collection and measurement system for Zero Waste diversion calculations.

The next step in our discussions toward a unified measurement system will be discussed at a workshop in Austin, co-sponsored by USEPA Region 6, STAR, and ARR. The event is entitled:

Sustainable Materials Management: Broadening Partnerships to Achieve Goals, and will be presented February 25-26 at the Palmer Events Center. The goals for the workshop include:

- Provide information on the EPA challenges and discuss ways to move them forward
- Share Sustainable Materials Management (SMM) implementation experiences and how developing networks can achieve results
- Facilitate Regional communication to be able to move SMM activities forward in Region 6
- Discuss the challenges to measurement toward Diversion Goals
- Discuss developing local economic markets to consume diverted materials

Registration for this workshop will be announced by the end of January.

2013 Ordinance Development

Zero Waste policies, as outlined in Chapter 21 of the ARR Master Plan, includes ordinances, incentives, bans, take-backs, purchasing specifications, and advocacy, which allow the City to increase diversion and decrease waste. Zero Waste policies are extremely important because they influence all the materials that are generated in the City, including waste and material streams not directly handled by the Department. By setting an example through consistent policy setting, the City can achieve Zero Waste citywide and lead the region and the state in diversion activity.

The following initiatives were evaluated and selected for implementation by the stakeholders in the development of the ARR Master Plan:

- Universal Recycling and Composting Ordinance(URO)
 The initial URO was adopted by City Council in 2010, with a five year phase in approach.
 Phase 2 revisions and amendments to the URO are currently being developed and will be presented to Council in 2013.
- <u>Single-Use Products and Packaging Ordinance</u>
 The first ordinance to restrict single-use packaging is the Single Use Bag Ordinance (SUBO),

adopted by City Council in March 2012. This ordinance will be fully implemented by 3/1/13. Throughout 2013-14, staff will explore other examples of wasteful packaging and products, and research possible policies and ordinances to restrict excessive waste through single-use products.

Construction and Demolition Ordinance (C&D)

Many cities have increased commercial diversion rates through the local requirement of recycling diversion of construction and demolition wastes. In 2013, staff will explore and discuss with stakeholders the development of an Austin C&D Ordinance. Various city departments will be involved, including ARR, Planning and Development, and Public Works. There will be several stakeholder meetings to gain input from local companies affected by such an ordinance. Given the potential large diversion impact, this ordinance will be a high priority in 2013 for ARR.

• Hauler Registration Ordinance

The Hauler registration program was revisited in 2012, through a ZWAC Hauler License Committee. On June 28, 2012, the Austin City Council approved Chapter 15-6 Article 3, which regulates private solid waste collection. This Council action revised the prior hauler ordinance, and includes the following key points:

- o Defines what type of haulers are required to apply for permits
- o Requires haulers to submit document of state safety inspection
- Requires haulers to submit tonnage reports in support of the City effort to track diversion activity
- o Requires fees on licensed trucks and containers, to support program expenses
- o Establishes enforcement procedures
- o Places the authority and enforcement of the program in Code Compliance Department

Take-Back Ordinance

Many communities are exploring retailer take-back of consumer products that cannot be recycled within the single-stream recycling collection system. Currently, ARR collects batteries from a variety of retail collection sites. In addition, ARR has participated as a collection site for the periodic pharmaceutical drug collection days, organized by the federal Drug Enforcement Agency. In 2013, staff will begin to research model take-back programs throughout the country to provide current best practices and legal challenges.

• Refundable Deposit (Bottle Bill)

ARR supports the implementation of deposits on recyclable/returnable beverage containers and supports recent efforts to propose a bill through state legislation. In addition, ARR supports the efforts of the Container Recycling Institute (CRI).

Extended Producer Responsibility Initiatives (EPR)

Beyond take-back ordinances, the general concept of EPR is the manufacturer responsibility for end-of-life management of discarded consumer goods. Dell and Goodwill Industries have teamed up to operate Project Reconnect, a good example of producer participation and leadership in managing the discards of computers. ARR supports expansion of this concept in future state legislation, and fully supports the efforts of the Texas Product Stewardship Council.

Recycling Market Trends

An excerpt from an article by Michael Fickes, Contributing Writer | Waste Age

Prices in the recycling commodity markets have generally fallen over the past 12 months. The downward trend in volumes and prices for recovered newsprint has grown stronger with the proliferation of tablet computers and newspaper apps. Prices for other recycled fiber materials have fallen as well.

"Prices for recycled (plastic) resins have made relatively large moves down over the past 12 months," says Pete Keller, vice president, recycling and customer solutions with Phoenix-based Republic Services Inc. "That has to do with the downward movement of fuel prices, which creates negative pressure on recycled plastic."

Steel and aluminum prices also have trended down in fairly dramatic ways.

As usual, glass is generally unaffected by the turmoil in other markets, with glass prices remaining relatively stable. "Because glass is heavy, it can't support much transportation," says Keller. "So glass remains a local market. Today, a growing number of regional secondary processors are taking more and more glass cullet and glass waste from MRFs [material recovery facilities], which seem to be landfilling less glass."

Moreover, it appears that the downward move in prices will continue. "Price movements between the third quarter this year and last year appear to be diverging, and that's unusual," says Keller. "Historically prices have picked up in the third quarter when orders for packaging increase in preparation for the holiday season. It happened last year. This year, however, we're seeing downward pressure on prices. It may turn around, but in mid-July, we're really not seeing the levels of demand we've seen in the past."

Staff Hires and Promotions Update

New employee	Promotions	Notes: Title/ Division
Nancy Chan		To: Quality Assurance Division Manager
Broderick Hannah		To: Solid Waste Operator
Cruz Banda		To: Contract Compliance Specialist Sr.
	John "Hunter" Prevost	To: Solid Waste Operator
Larry Middleton		To: Solid Waste Operator

Current and Upcoming Job Postings

Position	Contact Manager	Posting Status			
Administrative Specialist (SI)	Jessica King	Top candidate to start January 2, 2013			
Public Information & Marketing Program Manager	Jessica King	Posting for Manager review			
Planner III or Planner Senior	Jessica King/Gena McKinley	2nd round Interviews scheduled Jan 2013			
Financial Specialist	Sue Cooper	Interview being scheduled			
Accounting Manager	Sue Cooper	Position posted			

Position	Contact Manager	Posting Status			
Temporary-Utility Billing Specialist	Jessica Edwards	Top candidate to start January 2, 2013			
Safety Asst. Division Manager	Tammie Williamson	Top candidate to start January 14, 2013			
Human Resources Advisor	Blanche Quarterman	Position posted			
Economic & Business Development Liaison	Bob Gedert	Top candidate to start January 14, 2013			
Administrative Specialist (OS)	Richard McHale	Position posted			
Service Writer	Richard McHale	Top candidate to start January, 2013			
Solid Waste Specialist	Vidal Maldonado	Applications being reviewed			
Solid Waste Operator	Vidal Maldonado	Applications being reviewed			
Solid Waste Associate	Vidal Maldonado	Applications being reviewed			
Solid Waste Specialist	Donald Hardee	Position to be posted			
Temporary - Solid Waste Associate	Richard McHale	Applications being reviewed			
Solid Waste Supervisor	Ron Romero	Position posted			

Performance Statistical Reports

Single Stream Recycling Statistical Report FY 2012-13 through November 2012

Texas Disposal Systems (TDS) and Balcones Resources Inc (BRI)

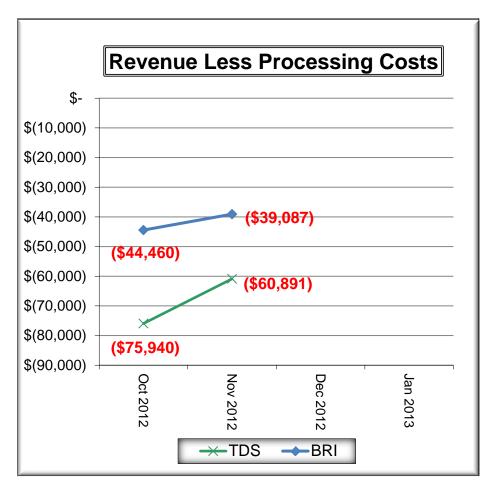
		Contractor Payments			Net Value to City	Landfill Cost Avoidance	
Month	Tons Delivered	Revenue	Processing Cost	Net Amount Due/(Owed)	\$ per ton value	Per Ton	Total
October 2012 - TDS	1,992.62	\$106,385	\$182,325	(\$75,940)	(\$38.11)	\$20.63	\$41,108
October 2012 - BRI	2,522.20	\$156,614	\$201,074	(\$44,460)	(\$17.63)	\$20.63	\$52,033
Total	4,514.82	\$262,999	\$383,399	(\$120,400)			\$93,141
November 2012 - TDS	1,676.28	\$92,488	\$153,380	(\$60,891)	(\$36.33)	\$20.63	\$34,582
November 2012 - BRI	2,864.82	\$188,214	\$227,301	(\$39,087)	(\$13.64)	\$20.63	\$59,101
Total	4,541.10	\$280,702	\$380,681	(\$99,978)			\$93,683
FY13 Totals	9055.92	\$543,701	\$764,080	(\$220,378)			\$186,824

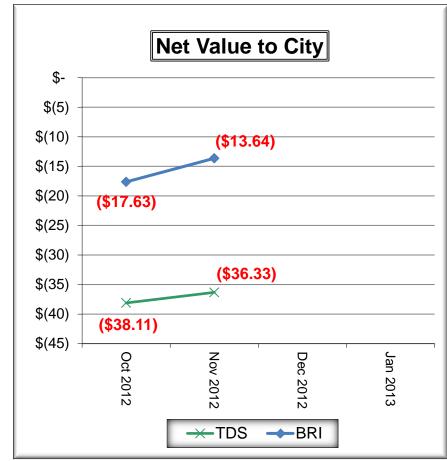
Material Composition Percentages						
	TDS	BRI				
Material	10/27/2012	10/22/2012				
ONP	13.80%	27.89%				
OCC	7.58%	11.15%				
Mixed Paper	19.76%	12.31%				
Tin	2.04%	2.28%				
UBC	1.32%	1.45%				
NHDPE	1.34%	0.90%				
CHDPE	1.11%	0.64%				
PETE	3.13%	3.58%				
Glass	30.61%	26.59%				
Residual	15.45%	10.33%				
Plastics 3-7	3.17%	2.53%				
Scrap Metals	0.69%	0.35%				
Other	0.00%	0.00%				
	100 000/	100 000/				

100.00% 100.00%

Single Stream Recycling Statistical Report FY 2012-13 through November 2012

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Austin Resource Recovery Curbside Collection and HHW Operations

				LAST FISCAL YEAR		CURRENT FISCAL YEAR				
		FY 2012	FY 2012 Goal	Oct 2011	Nov 2011	FY12 YTD (Oct '11 - Nov'11)	Oct 2012	Nov 2012	FY13 YTD (Oct '12 - Nov'12)	FY 2013 Goal
Disposed	Tons of curbside Garbage	129,653	123,000	9,646	10,751	20,397	10,627	10,652	21,279	127,000
sbo	Tons of Curbside Bulk Disposed	7,611	7,500	751	503	1,254	860	339	1,199	6,600
	HHW Operations Tons Disposed	434	400	34	22	56	29	32	61	400
Tons	Total Disposed Tons Collected Curbside and from HHW Operations	137,698	130,900	10,431	11,276	21,707	11,516	11,023	22,539	134,000
	Tons of curbside recycling	54,009	60,000	4,188	4,553	8,741	4,498	4,525	9,023	63,000
60	HHW Operations Tons recycled/reused	208	150	21	18	39	19	16	35	150
Diverted	Tons of Curbside Yard Trimmings	21,712	25,000	1,242	1,281	2,523	1,384	1,504	2,888	27,000
Ο̈́	Tons of Curbside Bulk Recycled	233	200	24	10	34	27	8	35	800
Tons	Tons of Curbside Brush Collected	7,720	7,500	542	625	1,167	843	578	1,421	6,400
υL	Total Diverted Tons Collected Curbside and from HHW Operations	83,882	92,850	6,017	6,487	12,504	6,771	6,631	13,402	97,350
	Total Tons Collected Curbside and from HHW Operations	221,580	223,750	16,447	17,763	34,210	18,287	17,654	35,941	231,350
	Percent of Waste Stream Diverted by Curbside and HHW Operations	37.86%	41.50%	36.58%	36.52%	36.55%	37.03%	37.56%	37.29%	42.08%
	Pounds of Garbage collected per customer per pickup	27.05	25.06	24.38	27.23	n/a	26.48	26.36	n/a	26.03
	Number of Garbage customers	184,316	188,807	182,766	182,354	n/a	185,349	186,628	n/a	187,676
	Pounds of Recycled materials collected per customer per pickup (every other week)	22.71	24.44	21.31	23.21	n/a	22.59	22.70	n/a	25.82
	Pounds of Yard Trimmings collected per customer per week	4.56	5.09	3.16	3.27	n/a	3.48	3.77	n/a	5.53
N	umber of Recycling and Yard Trimmings customers	182,971	188,807	181,581	181,160	n/a	183,933	184,182	n/a	187,676

Austin Resource Recovery Curbside Collection and HHW Operations

