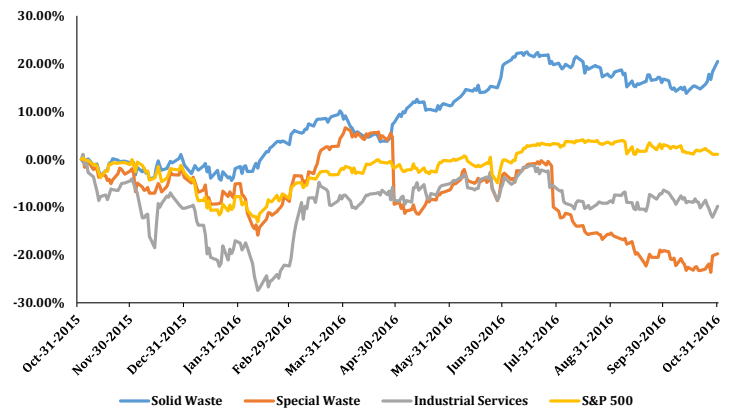
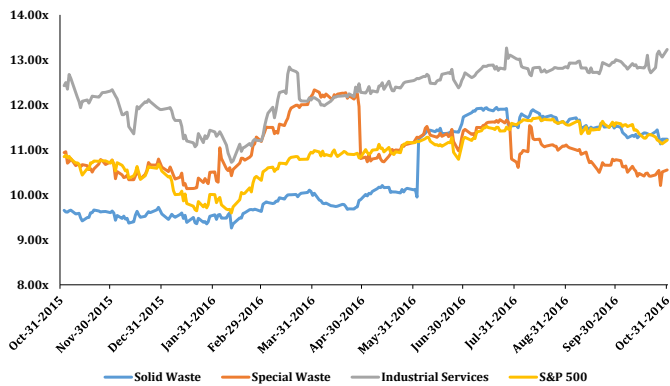


# Trash Talk

An Environmental Services  
Newsletter

Environmental Services LTM TEV/EBITDA

Environmental Services LTM Share Price (Shown as % change)



## Indices Performance (% change)

	<u>October 2016</u>	<u>LTM</u>		<u>October 2016</u>	<u>LTM</u>
S&P 500	(1.7%)	2.3%	Solid Waste	3.1%	20.5%
Dow Jones	(0.6%)	2.7%	Special Waste	(0.5%)	(19.7%)
NASDAQ	(2.2%)	2.7%	Industrial Services	(3.0%)	(9.8%)

(Source: CapitalIQ)

## Largest Environmental Services Movers and Losers (largest % changes in the month of October)

Casella Waste Systems, Inc.	8.7%	Industrial Services of America, Inc.	(20.0%)
Cypress Energy Partners, L.P.	8.6%	Quest Resource Holding Corporation	(18.3%)
Republic Services, Inc.	4.5%	Sharps Compliance Corp.	(16.4%)
Waste Management, Inc.	3.5%	CECO Environmental Corp.	(11.5%)
Darling Ingredients Inc.	1.4%	Perma-Fix Environmental Services Inc.	(11.5%)

## Environmental Services Industry Contacts

**Tom Denison**  
(312) 283-0819  
thomas.denison@thechicagocorp.com

**Phil Clarke**  
(312) 283-0803  
philip.clarke@thechicagocorp.com



# Trash Talk

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## Select Public Trading Statistics (as of 10/31/2016)

### Solid Waste:

(\$ in millions, except per share data)

Company	Share Price 10/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Waste Management, Inc.	WM	\$65.66	93.1%	\$29,022	\$38,277	2.9x	10.6x	16.9x	26.3x	22.1x	24.4x	37.5%	17.2%	27.3%	2.5x
Republic Services, Inc.	RSG	\$52.63	99.5%	\$17,892	\$25,605	2.8x	9.8x	16.6x	30.6x	23.1x	25.0x	38.7%	16.6%	28.1%	3.0x
Waste Connections, Inc.	WCN	\$75.21	94.3%	\$13,172	\$16,754	5.9x	18.5x	32.6x	39.1x	NM	34.4x	42.7%	18.0%	31.6%	4.0x
Advanced Disposal Services, Inc.	ADSW	\$20.03	93.2%	\$1,735	\$3,977	2.8x	10.4x	35.2x	0.0x	NM	(426.4x)	38.2%	8.5%	27.5%	5.8x
Caseella Waste Systems Inc.	CWST	\$11.20	98.2%	\$465	\$965	1.7x	9.7x	26.1x	NM	(43.6x)	NM	32.2%	7.4%	18.6%	4.8x
Mean				\$12,457	\$17,116	3.2x	11.8x	25.5x	24.0x	0.6x	-85.7x	37.9%	13.5%	26.6%	4.0x
Median				\$13,172	\$16,754	2.8x	10.4x	26.1x	28.5x	22.1x	24.7x	38.2%	16.6%	27.5%	4.0x
High				\$29,022	\$38,277	5.9x	18.5x	35.2x	39.1x	23.1x	34.4x	42.7%	18.0%	31.6%	5.8x
Low				\$465	\$965	1.7x	9.7x	16.6x	0.0x	-43.6x	-426.4x	32.2%	7.4%	18.6%	2.5x

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months

### Special Waste:

(\$ in millions, except per share data)

Company	Share Price 10/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			LTM Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Stericycle, Inc.	SRCL	\$80.09	62.1%	\$6,779	\$9,763	2.8x	13.2x	19.5x	29.1x	31.5x	18.0x	45.1%	14.1%	21.0%	4.0x
Clean Harbors, Inc.	CLH	\$47.32	86.8%	\$2,721	\$4,000	1.4x	9.3x	26.5x	114.4x	36.2x	373.1x	29.4%	4.1%	14.4%	3.4x
Darling Ingredients Inc.	DAR	\$13.60	85.4%	\$2,238	\$4,088	1.2x	7.8x	16.7x	20.7x	NM	30.8x	22.4%	4.5%	13.0%	3.9x
US Ecology, Inc.	ECOL	\$42.25	85.5%	\$920	\$1,202	2.4x	10.3x	15.6x	26.7x	26.1x	28.2x	31.2%	15.5%	23.5%	2.4x
Sharps Compliance Corp.	SMED	\$3.71	38.0%	\$59	\$55	1.6x	97.6x	NM	NM	NM	(250.0x)	31.9%	(1.0%)	1.7%	(6.2x)
Perma-Fix Environmental Services Inc.	PESI	\$4.15	73.6%	\$48	\$60	1.0x	33.6x	NM	NM	NM	NM	19.7%	(3.3%)	3.1%	5.9x
Mean				\$2,128	\$3,195	1.7x	28.6x	19.6x	47.7x	31.3x	40.0x	30.0%	5.7%	12.8%	2.2x
Median				\$1,579	\$2,601	1.5x	11.7x	18.1x	27.9x	31.5x	28.2x	30.3%	4.3%	13.7%	3.7x
High				\$6,779	\$9,763	2.8x	97.6x	26.5x	114.4x	36.2x	373.1x	45.1%	15.5%	23.5%	5.9x
Low				\$48	\$55	1.0x	7.8x	15.6x	20.7x	26.1x	-250.0x	19.7%	-3.3%	1.7%	(6.2x)

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months

### Industrial Services:

(\$ in millions, except per share data)

Company	Share Price 10/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			LTM Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Covanta Holding Corporation	CVA	\$15.00	84.5%	\$1,948	\$4,534	2.7x	13.4x	34.1x	30.0x	NM	NM	30.4%	7.6%	19.9%	7.8x
CECO Environmental Corp.	CECE	\$9.90	84.3%	\$338	\$480	1.1x	8.7x	14.2x	NM	13.3x	15.0x	31.2%	7.7%	12.6%	2.1x
Heritage-Crystal Clean, Inc	HCCI	\$13.10	92.3%	\$294	\$331	1.0x	13.8x	44.7x	NM	33.2x	42.3x	20.6%	2.2%	7.0%	1.5x
Cypress Energy Partners, L.P.	CELP	\$10.36	83.8%	\$123	\$213	0.6x	13.9x	23.0x	NM	15.9x	26.2x	11.5%	2.6%	4.5%	7.8x
Ecology & Environment, Inc.	EET	\$9.80	85.0%	\$42	\$36	0.3x	5.5x	6.6x	33.3x	NM	NM	45.1%	3.9%	5.0%	(2.1x)
FacI-Tech, Inc.	FTEK	\$1.27	50.0%	\$30	\$17	0.2x	NM	NM	NM	NM	NM	37.4%	(12.5%)	(6.7%)	3.1x
Quest Resource Holding Corporation	QRHC	\$1.71	23.4%	\$25	\$28	0.2x	NM	NM	NM	NM	NM	7.7%	(4.7%)	(2.4%)	(0.3x)
Industrial Services of America, Inc.	ISAA	\$1.22	40.0%	\$10	\$15	0.5x	NM	NM	NM	NM	NM	(3.9%)	(18.0%)	(10.8%)	(1.4x)
Mean				\$351	\$703	0.8x	11.1x	24.5x	31.6x	20.8x	27.8x	22.5%	-1.4%	3.6%	2.3x
Median				\$82	\$125	0.6x	13.4x	23.0x	31.6x	15.9x	26.2x	25.5%	2.4%	4.7%	1.8x
High				\$1,948	\$4,534	2.7x	13.9x	44.7x	33.3x	33.2x	42.3x	45.1%	7.7%	19.9%	7.8x
Low				\$10	\$15	0.2x	5.5x	6.6x	30.0x	13.3x	15.0x	-3.9%	-18.0%	-10.8%	(2.1x)

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months





# Trash Talk

An Environmental Services  
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## Select Mergers and Acquisitions & Capital Raising News

### ❖ GFL Builds U.S. Base

October 4, 2016 – Toronto-based GFL has reached an agreement to purchase Sterling Heights, Michigan-based Rizzo Environmental Services Inc. Kinderhook Industries LLC sold its equity interest in Rizzo to a U.S. subsidiary of GFL. No financial terms were disclosed. Founded in 1988, Rizzo is a market leader in municipal, commercial and industrial solid waste collection and in commercial recycling processing and brokerage. Rizzo currently provides collection services to more than 40 municipalities in Southeastern Michigan. The current management team of Rizzo, led by Chuck Rizzo, Jr. will remain with the Company. GFL is a Canadian diversified environmental services company offering services in solid waste management, liquid waste management and soil remediation. Through its platform of operations in Canada and the U.S., GFL serves over 80,000 commercial, industrial and institutional customers, more than 2.5 million households under municipal collection contracts and has a workforce of more than 4,000 employees. Rizzo has been in the news of late because it's at the center of the dispute playing out over Flint, Michigan's solid waste collection. The mayor has attempted to terminate its contract with Republic Services and award it to Rizzo. Currently, Republic continues to serve the city under a 90-day contract as the fate of the contract remains in flux.

### ❖ Santek Scores Georgia Buy

October 4, 2016 – Cleveland, Tennessee-based Santek Waste Services LLC announced its acquisition of North Metro Waste, Inc.'s residential and commercial customer base in Ball Ground, Georgia. Effective October 1, Santek will be providing those services in Bartow, Cherokee, Pickens and Gordon counties in Georgia. Santek currently manages the Redbone Ridges Landfill in Gordon County and this acquisition will complement Santek's waste collection presence locally. In December 2015, Santek completed a \$153 million recapitalization of the company to provide for growth opportunities; since then, the firm has completed several transactions.

### ❖ Advanced Disposal Stock Begins Trading on NYSE

October 6, 2016 – Advanced Disposal Services began trading on the New York Stock Exchange, moving ahead with its long-planned initial public offering. The firm offered 19,250,000 shares of its common stock at \$18.00 per share but effectively entered the market at \$20.50 per share. The stock at one point rose to \$21.50 per share before closing at \$19.82 per share. The shares are trading on the New York Stock Exchange under the ticker symbol "ADSW."

### ❖ Alter Trading Corp. Acquires Metal Recycling Firm Joseph Behr & Sons

October 10, 2016 – In a combination of two old line scrap metal recycling firms, Alter Trading Corp. is acquiring Joseph Behr & Sons. The terms of the transaction were not announced. The majority of Behr's 350 employees have accepted positions with Alter. The acquisition includes nine metal processing sites in Illinois, Iowa and Wisconsin, including three shredding operations and a specialty metals business. Alter, founded in 1898, is a privately owned, fourth-generation company. With the Behr acquisitions, Alter now employs 1,325 workers and has 61 metal recycling sites and five trading offices in the U.S. and China.

### ❖ Casella Waste Systems Moves Forward with Debt Refinancing

October 10, 2016 – Casella released an update on its debt refinancing status: Bank of America Merrill Lynch has advised Casella that certain financial institutions and other investors have provided commitments to fund a new term loan B facility in the amount of \$350 million priced at 99.50 percent of the principal amount. In addition to that, the investors and institutions have committed to funding a revolving line of credit facility in the amount of \$160 million, which is slightly above what Casella was originally considering. Upon closing, the term loan B facility is expected to have a 7-year term with an interest rate of LIBOR plus 3.00 percent per annum. Casella is planning on using the credit facility funds for the redemption of its outstanding 7.75 percent Senior Subordinated Notes due 2019, repayment in full of its existing senior secured asset-based revolving credit and letter of credit facility, transaction-related fees and expenses, working capital and other purposes. The total cost of this transaction will be approximately \$15 million, with the total annual interest savings expected to be about \$11 million.

### ❖ British Waste Management Firm Cuts IPO Price

October 17, 2016 – Biffa, Britain's second largest waste company, announced plans for an IPO last month, seeking a market valuation of about £1 billion. The company failed to get investor support for a sale for a value of up to £675 million. Investors have become increasingly concerned about the outlook for UK companies amid worries about Britain's economic prospects, the plunging value of the pound and the government's confrontational stance over Brexit. Biffa and its owners, including private equity fund Bain Capital, were said to be determined to push the IPO through.

### ❖ Advanced Disposal Considering Debt Restructuring

October 21, 2016 – Advanced Disposal Services is considering a potential debt refinancing, consisting of a \$1.8 billion new senior secured credit facility and an offering of \$425 million in senior unsecured notes. The intended use of the proceeds of the potential refinancing, if effected, would be for, among other purposes, the repayment in full of the company's existing senior secured term loan B facility and revolving credit facility and refinancing of the Company's 8¼ percent Senior Notes due 2020 and related fees and expenses.



# Trash Talk

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## Select Industry News

### ❖ Waste Management Back on Dow Jones Sustainability Indices-North America

October 4, 2016 – Waste Management has been named to the 2016 Dow Jones Sustainability Index, marking its thirteenth time in 14 years to be recognized. Companies are selected for the indices based on an assessment of their long-term economic, environmental and social practices. Only companies that lead their industries based on this assessment are included in the indices. Waste Management scored high on corporate governance, risk management, codes of conduct, climate strategy and social responsibility. Launched in 1999, the DJSI were the first global indices to track the financial performance of the leading sustainability-driven companies worldwide.

### ❖ Kansas Residents Sue Deffenbaugh Industries for Landfill Odors

October 4, 2016 – Residents of Shawnee, Kansas, are suing Deffenbaugh Industries Inc. for the odor, pollutants and air contaminants that its landfill is producing. The residents have asked the U.S. District Court to declare the odors a nuisance and to create an order that would require Deffenbaugh to resolve the solution. This action follows the landfill's hundreds of complaints that have been issued over the past few years.

### ❖ Republic Services Reveals New Customer Resource Center in Arizona

October 14, 2016 – Earlier this year, Republic Services reorganized its structure to streamline operations. Now, the company has revealed its new 72,000-square-foot Customer Resource Center in Chandler, Arizona. The center is the third of three centers, all of which are designed to enhance Republic's customer service for more than 14 million global customers. This new center goes hand-in-hand with Republic's latest investment in the Arizona economy. According to a recent study conducted by Arizona State University's W.P. Carey School of Business, through the L. William Seidman Research Institute, Republic has a \$497 million impact annually on the state's economy. This is due to Republic employing more than 1,500 people at 22 locations, creating 2.9 jobs for every Republic employee in Arizona and generating \$53 million in tax revenue per year.

### ❖ North Bay Corp. Faces \$13.4M in Fines for Alleged Contract Violations

October 25, 2016 – Santa Rosa, California-based North Bay Corp. faces \$13.4 million in fines from years of alleged contract violations. In addition to that issue, North Bay's request to operate a regional recycling center in Santa Rosa has been rejected, and the company must invest \$4.5 million to upgrade one of its two Santa Rosa recycling centers, which have operated for more than a year even though a cease-and-desist order was issued from the county Department of Environmental Health.

### ❖ Solid Waste Firms Post Strong Third Quarter

October 28, 2016 – Republic Services, Waste Connections and Covanta Energy Corp. all reported third quarter earnings. A key theme across the board has been strong core price and volume growth across business lines. That's translated into healthy revenue, free cash flow and net income. In addition, firms reported some improvement in recycling lines, primarily driven by improving commodity prices on fiber.

### ❖ EPA Finalizes Changes to Hazardous Waste Export and Import Regulations

October 31, 2016 – The U.S. Environmental Protection Agency (EPA) finalized an updated Hazardous Waste Import and Export Regulations to streamline the hazardous waste export and import process, implement mandatory electronic reporting for international shipments and electronically linking export information. Part of the new rule requires mandatory electronic reporting to EPA, which will enable increased sharing of hazardous waste export and import data with state programs, the general public and individual hazardous waste exporters and importers. While some electronic reporting will be required when the rule becomes effective, the full range of electronic reporting will not be mandatory until the respective electronic reporting functions are built and beta tested, at which point a compliance date will be announced in a separate Federal Register announcement.

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Sources include Waste360, Waste Dive and various publicly available news publications. Additional information is available upon request.

