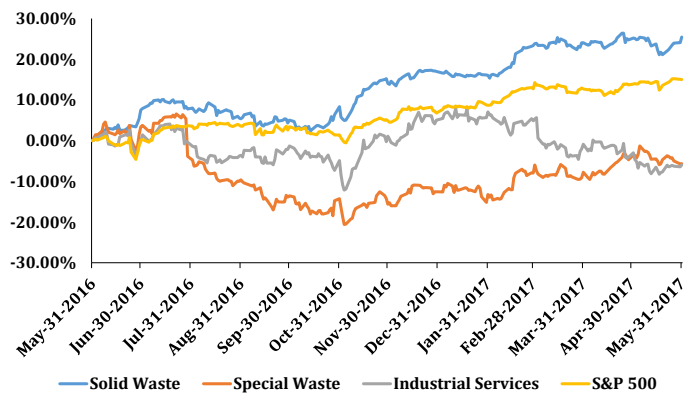
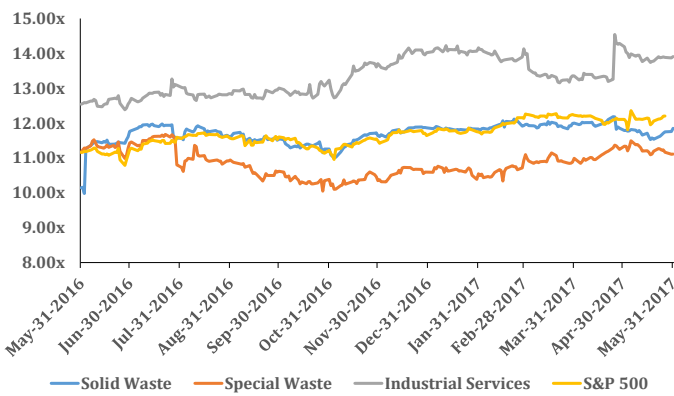


Trash Talk

An Environmental Services Newsletter

Environmental Services LTM TEV/EBITDA

Environmental Services LTM Share Price (Shown as % change)



Indices Performance (% change)

	<u>May 2017</u>	<u>LTM</u>		<u>May 2017</u>	<u>LTM</u>
S&P 500	1.0%	15.0%	Solid Waste	1.0%	25.4%
Dow Jones	0.5%	18.1%	Special Waste	(1.0%)	(5.6%)
NASDAQ	1.8%	25.3%	Industrial Services	(1.9%)	(5.9%)

(Source: CapitalIQ)

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

Industrial Services of America, Inc.	12.2%	Cypress Energy Partners, L.P.	(20.2%)
Ecology & Environment, Inc.	6.4%	CECO Environmental Corp.	(16.7%)
US Ecology, Inc.	6.1%	Quest Resource Holding Corporation	(8.6%)
Darling Ingredients Inc.	3.6%	Casella Waste Systems, Inc.	(6.8%)
Covanta Holding Corporation	1.4%	Meridian Waste Solutions, Inc.	(6.6%)

Environmental Services Industry Contacts

Tom Denison
(312) 283-0819

thomas.denison@thechicagocorp.com

Phil Clarke
(312) 283-0803

philip.clarke@thechicagocorp.com



Trash Talk

An Environmental Services Newsletter

Select Public Trading Statistics (as of 5/31/2017)

Solid Waste:

(\$ in millions, except per share data)

Company	Share Price 05/31/2017	% 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	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA			
Waste Management, Inc.	WM	\$72.91	97.8%	\$32,212	\$41,245	3.0x	11.1x	17.3x	26.6x	23.6x	21.6x	37.6%	17.7%	27.2%	2.4x	
Republic Services, Inc.	RSG	\$63.61	99.2%	\$21,505	\$29,145	3.1x	10.9x	18.2x	33.8x	26.0x	23.3x	38.5%	16.8%	28.1%	2.8x	
Waste Connections, Inc.	WCN	\$63.43	99.9%	\$16,704	\$20,435	5.2x	16.8x	30.3x	44.5x	32.2x	28.0x	41.5%	17.0%	30.9%	3.1x	
Advanced Disposal Services, Inc.	ADSW	\$23.32	96.8%	\$2,058	\$4,002	2.8x	10.2x	30.1x	0.0x	NM	NM	37.9%	9.3%	27.7%	5.0x	
Caseella Waste Systems, Inc.	CWST	\$14.02	88.5%	\$587	\$1,094	1.9x	9.8x	21.7x	NM	NM	30.9x	24.9x	32.7%	8.8%	19.5%	4.5x
Meridian Waste Solutions, Inc.	MRDN	\$3.10	10.0%	\$23	\$107	3.0x	NM	NM	NM	NM	NM	38.1%	(30.2%)	(4.9%)	(48.8x)	
Mean				\$12,182	\$16,004	3.2x	11.7x	23.5x	26.2x	28.2x	24.5x	37.7%	6.6%	21.4%	-5.2x	
Median				\$9,381	\$12,218	3.0x	10.9x	21.7x	30.2x	28.5x	24.1x	38.0%	13.1%	27.4%	2.9x	
High				\$32,212	\$41,245	5.2x	16.8x	30.3x	44.5x	32.2x	28.0x	41.5%	17.7%	30.9%	5.0x	
Low				\$23	\$107	1.9x	9.8x	17.3x	0.0x	23.6x	21.6x	32.7%	-30.2%	-4.9%	-48.8x	

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 05/31/2017	% 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	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA		
Stericycle, Inc.	SRCL	\$81.77	75.9%	\$6,972	\$9,800	2.7x	12.3x	18.3x	42.6x	20.2x	19.3x	44.5%	15.0%	22.3%	3.5x
Clean Harbors, Inc.	CLH	\$58.41	94.8%	\$3,342	\$4,678	1.7x	11.6x	40.9x	NM	86.2x	50.0x	30.0%	4.1%	14.4%	3.3x
Darling Ingredients Inc.	DAR	\$15.67	94.3%	\$2,580	\$4,298	1.2x	8.5x	19.6x	24.1x	NM	22.7x	21.9%	4.4%	12.6%	3.6x
US Ecology, Inc.	ECOL	\$50.03	92.6%	\$1,091	\$1,256	2.9x	12.7x	20.4x	34.3x	30.3x	25.6x	30.4%	14.0%	22.6%	2.5x
Sharps Compliance Corp.	SMED	\$4.06	69.2%	\$65	\$62	1.7x	NM	NM	NM	NM	NM	31.1%	(2.2%)	1.4%	(6.0x)
Perma-Fix Environmental Services, Inc.	PEFI	\$3.50	62.1%	\$41	\$48	0.9x	19.6x	NM	NM	NM	NM	19.2%	(3.8%)	4.6%	2.8x
Mean				\$2,349	\$3,374	1.8x	12.9x	24.8x	33.7x	45.6x	29.4x	29.5%	5.2%	13.0%	1.6x
Median				\$1,836	\$2,827	1.7x	12.3x	20.0x	34.3x	30.3x	24.1x	30.2%	4.2%	13.5%	3.0x
High				\$6,972	\$9,800	2.9x	19.6x	40.9x	42.6x	86.2x	50.0x	44.5%	15.0%	22.6%	3.6x
Low				\$41	\$48	0.9x	8.5x	18.3x	24.1x	20.2x	19.3x	19.2%	-3.8%	1.4%	(6.0x)

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 05/31/2017	% 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	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA		
Covanta Holding Corporation	CVA	\$14.75	86.0%	\$1,935	\$4,591	2.7x	15.1x	46.8x	NM	NM	NM	30.9%	5.7%	17.9%	8.7x
CECO Environmental Corp.	CECE	\$9.40	63.2%	\$325	\$405	1.0x	7.4x	11.0x	NM	13.8x	12.3x	33.4%	9.1%	13.5%	1.5x
Heritage-Crystal Clean, Inc.	HCCI	\$15.25	91.0%	\$344	\$362	1.0x	9.8x	19.2x	27.8x	30.0x	24.7x	24.8%	5.4%	10.5%	0.5x
Cypress Energy Partners, L.P.	CELP	\$7.01	49.1%	\$83	\$172	0.6x	11.8x	19.6x	NM	20.6x	15.7x	11.8%	2.9%	4.9%	7.8x
Ecology & Environment, Inc.	EET	\$11.30	99.6%	\$49	\$38	0.4x	7.4x	9.4x	38.1x	NM	NM	44.6%	4.6%	5.6%	(2.1x)
Fuel Tech, Inc.	FTEK	\$0.88	48.9%	\$21	\$11	0.2x	NM	NM	NM	NM	NM	35.9%	(25.1%)	(18.1%)	1.2x
Quest Resource Holding Corporation	QRHC	\$2.54	70.6%	\$39	\$45	0.2x	NM	NM	NM	NM	NM	8.4%	(4.0%)	(1.7%)	(2.0x)
Industrial Services of America, Inc.	ISAA	\$1.29	38.5%	\$10	\$17	0.4x	31.5x	NM	NM	NM	NM	5.8%	(4.1%)	1.2%	11.9x
Mean				\$351	\$705	0.8x	13.8x	21.2x	33.0x	21.5x	17.6x	24.4%	-0.7%	4.2%	3.4x
Median				\$66	\$109	0.5x	10.8x	19.2x	33.0x	20.6x	15.7x	27.8%	3.8%	5.3%	1.3x
High				\$1,935	\$4,591	2.7x	31.5x	46.8x	38.1x	30.0x	24.7x	44.6%	9.1%	17.9%	11.9x
Low				\$10	\$11	0.2x	7.4x	9.4x	27.8x	13.8x	12.3x	5.8%	-25.1%	-18.1%	(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
Newsletter

Select Mergers and Acquisitions & Capital Raising News

❖ Bobcat North America Acquires Russo and Sons, Inc.

May 5, 2017 – Sarasota, Florida-based solid waste holding company Bobcat North America (BNA) has acquired Ocoee, Florida-based construction and demolition waste hauler Russo and Sons, Inc. for an undisclosed amount. Mike and Marilyn Russo, the former owners of Russo and Sons, will remain employed with the business under BNA's ownership.

❖ Waste Connections Shareholders Approve Stock Split

May 23, 2017 – Waste Connections announced that at its annual and special meeting of shareholders, shareholders passed a special resolution to approve the proposed three-for-two split of the company's common shares. Shareholders of record as of the close of business on June 7, 2017 will receive from the company's transfer agent on June 16, 2017 one additional common share for every two shares held. The New York Stock Exchange and the Toronto Stock Exchange will implement "due bill trading" in connection with the share split. A due bill is a financial instrument used to document and identify a seller's obligation. In this case, any person purchasing common shares commencing at the opening of business two trading days prior to June 7 and ending on June 16, inclusive, will receive a payable right. Any trades that are executed during the due bill period will be flagged to ensure purchasers receive the entitlement to the additional common shares issuable as a result of the share split. The common shares will commence trading on an ex-dividend basis on June 19, 2017. The due bill redemption date will be Wednesday, June 21, 2017. Existing shareholders do not need to take any action. The company will use the direct registration system to electronically register the common shares issued pursuant to the share split. Subject to the treatment of fractional shares, the share split is not expected to constitute a taxable transaction for either Canadian federal income tax purposes or U.S. federal income tax purposes.

Select Industry News

❖ Waste Management Recruits Women Drivers to Combat Driver Shortage

May 15, 2017 – There has been a driver shortage in America for quite some time now, and one of the companies affected by that shortage is Waste Management, which will be facing a shortage of approximately 175,000 drivers across the country over the next seven years. In an effort to expand its workforce, Waste Management is focusing on hiring as many women as possible. Currently, women make up only 11 percent of the company's staff and Waste Management believes that bringing more women on board will help strengthen the company.

❖ SWANA and ASTSWMO Sign Memorandum of Understanding for Recycling, Food Waste and Education

May 22, 2017 – The Solid Waste Association of North America (SWANA) and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) have signed a memorandum of understanding (MOU) to collaborate on topics of mutual interest, including recycling, food waste and education. While the duo will initially focus on recycling, food waste and education, they also plan to develop strategies that provide reciprocal awareness of each association within the other association's membership.

❖ Driver Training Rule Delayed – Again

May 22, 2017 – The Federal Motor Carrier Safety Administration (FMCSA) said it is again delaying implementation of its final rule governing training standards for new truck drivers until June 5. The notice will be published in the Federal Register on May 23. In December, FMCSA announced the final rule that calls for new drivers seeking to obtain a commercial driver's license to be required to show proficiency in both knowledge training and behind-the-wheel training. At that time, FMCSA said the rule would take effect in February, with a compliance deadline stretching until 2020. However, when President Trump took office in January, he ordered a temporarily freeze on pending regulations, requiring FMCSA to delay the rule, most recently until May 22.

❖ Slow Down to Get Around Legislation Approved in Missouri

May 23, 2017 – On May 19, the Missouri General Assembly approved legislation that will protect workers in the waste and recycling industry on the state's roadways. Missouri is now the 16th state to pass Slow Down to Get Around (SDTGA) legislation, which is designed to protect waste and recycling workers. The Missouri Chapter of the National Waste and Recycling Association (NWRA) worked with key stakeholders to develop this legislation and achieve its support in the Missouri legislature. Missouri now joins 15 other states that have enacted Slow Down to Get Around, including Alabama, Florida, Georgia, Indiana, Illinois, Iowa, Kentucky, Michigan, New Jersey, New York, North Carolina, Oklahoma, Virginia, Wisconsin and West Virginia.



Trash Talk

An Environmental Services
Newsletter

❖ EPA Officially Stays For Landfill Methane Rules

May 23, 2017 – The U.S. Environmental Protection Agency (EPA) has announced a 90-day administrative stay for the August 2016 New Source Performance Standards and Emissions Guidelines for municipal solid waste landfills. In a May 5 letter, EPA notified industry petitioners that the agency was granting their reconsideration request. This stay will allow EPA to reconsider certain aspects of the new source standards and emission guidelines for existing landfills. The National Waste & Recycling Association and Solid Waste Association of North America on May 10 had previously announced they had received a letter from the Administrator of the EPA indicating an intent to reconsider the rules. In August 2016, EPA issued updated guidelines for existing municipal solid waste landfills and standards for newly built, modified or reconstructed landfills. According to the EPA’s statement, it is now reconsidering “certain aspects of these standards, including the surface emissions monitoring option known as tier 4.” According to the EPA, sources do not need to comply with any of the requirements while the 90-day stay is in effect. The EPA estimates that implementing these rules would cost businesses more than \$100 million per year to install and operate gas collection and control systems. As part of the reconsideration process, EPA expects to prepare a proposed rule, which will allow for public comment.

❖ Spokane Files Appeal Against Findings, Fine in WTE Plant Investigation

May 24, 2017 – Last year, Spokane’s waste-to-energy (WTE) plant caused a stir after a mound of trash piled four stories high filled one of the plant’s bays. And shortly following that incident, two workers at the plant were injured after they were burned while cleaning out a boiler. In an effort to improve safety and operations, the Spokane City Council approved the plant’s proposed safety upgrades in April. Soon after that approval was granted, the Washington Department of Labor & Industries cited Spokane for 10 “serious” violations of Washington administrative codes, presenting the plant with a \$60,000 fine for alleged training and safety failures that led to the two employees’ injuries. Now, Spokane has filed an appeal against the fine, stating that “the findings weren’t relative of the actual event that transpired.” The Department of Labor & Industries is expected to review the additional information provided by Spokane and prepare an amended list of charges, if deemed appropriate, by the end of June.

❖ Sonoma County, California Solid Waste Workers Vote to Join Teamsters Local 665

May 24, 2017 – Solid waste and recycling workers in Sonoma County, California, voted to join Teamsters Local 665. A majority of the almost 400 drivers, mechanics, customer service representatives and other workers voted to join the union. The union said the election is the culmination of more than 20 years of attempts to bring waste and recycling workers in Sonoma County into the Teamsters. This was the final remaining major non-union group in this industry in Northern California, according to the union. The cities of Santa Rosa and Windsor are engaged in a competitive bidding process for these services and the workers will likely be working under new management in June.

Trash Talk is a monthly newsletter published by The Chicago Corporation. To subscribe, please visit www.thechicagocorp.com.

Information contained in this publication is based on data obtained from sources we deem to be reliable, however, it is not guaranteed as to accuracy and does not purport to be complete. Nothing contained in this publication is intended to be a recommendation of a specific security or company nor is any of the information contained herein intended to constitute an analysis of any company or security reasonably sufficient to form the basis for any investment decision. Nothing contained in this publication constitutes an offer to buy or sell or the solicitation of an offer to buy or sell any security. Officers or employees of affiliates of The Chicago Corporation, or members of their families, may have a beneficial interest in the securities of a specific company mentioned in this publication and may purchase or sell such securities in the open market or otherwise. Sources include Waste360, Waste Dive and various publicly available news publications. Additional information is available upon request.