



(Source: CapitalIQ)

Largest Environmental So	ervices Mo	overs and Losers (largest % changes in the month	of April)
Quest Resource Holding Corporation	18.3%	Industrial Services of America, Inc.	(31.0%)
Perma-Fix Environmental Services, Inc.	14.3%	Fuel Tech, Inc.	(14.7%)
Heritage-Crystal Clean, Inc.	9.9%	Meridian Waste Solutions, Inc.	(14.7%)
CECO Environmental Corp.	7.4%	Sharps Compliance Corp.	(9.7%)
Casella Waste Systems, Inc.	6.7%	Covanta Holding Corporation	(7.3%)

Environmental Services Industry Contacts

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Select Public Trading Statistics (as of 4/30/2017)

Solid Waste:

(\$ in millions, except per share data)															
							Valuation Multipl	es	PE Multiples			LTM	Operating	_	
Company		Share Price 04/30/2017	% of 52 Wk High	Market Capitalization	Enterprise Value	TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA	Net Debt/EBITDA
Waste Management, Inc.	WM	\$72.78	97.6%	\$32,164	\$41,197	3.0x	11.1x	17.2x	26.6x	23.6x	21.6x	37.6%	17.7%	27.2%	2.4x
Republic Services, Inc.	RSG	\$62.99	98.3%	\$21,296	\$28,935	3.0x	10.8x	18.1x	33.5x	26.3x	23.5x	38.5%	16.8%	28.1%	2.8x
Waste Connections, Inc.	WCN	\$92.02	98.1%	\$16,155	\$19,882	5.0x	17.2x	32.6x	43.0x	31.8x	28.0x	41.5%	17.0%	30.9%	3.1x
Advanced Disposal Services, Inc.	ADSW	\$23.78	98.7%	\$2,099	\$4,021	2.9x	10.1x	29.5x	0.0x	NM	NM	37.9%	9.3%	27.7%	5.0x
Casella Waste Systems, Inc.	CWST	\$15.05	99.5%	\$630	\$1,136	2.0x	10.6x	24.8x	NM	31.2x	24.9x	32.7%	8.8%	19.5%	4.5x
Meridian Waste Solutions, Inc.	MRDN	\$3.32	8.5%	\$23	\$69	2.2x	NM	NM	NM	NM	NM	39.4%	(39.9%	(16.0%)) (8.5x)
Mean				\$12,061	\$15,874	3.0x	12.0x	24.4x	25.8x	28.2x	24.5x	37.9%	5.09	6 19.6%	1.5x
Median				\$9,127	\$11,952	2.9x	10.8x	24.8x	30.0x	28.7x	24.2x	38.2%	13.19	6 27.4%	2.9x
High				\$32,164	\$41,197	5.0x	17.2x	32.6x	43.0x	31.8x	28.0x	41.5%	17.79	6 30.9%	5.0x
Low				\$23	\$69	2.0x	10.1x	17.2x	0.0x	23.6x	21.6x	32.7%	-39.99	6 -16.0%	-8.5x

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)															
						Valuation Multiples			PE Multiples			LTM (Operating 1		
Company		Share Price 04/30/2017	% of 52 Wk High	Market Capitalization	Enterprise Value	TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA	Net Debt/EBITDA
Stericycle, Inc.	SRCL	\$85.34	79.2%	\$7,276	\$10,193	2.9x	12.5x	18.2x	41.0x	20.0x	19.2x	44.5%	15.0%	22.3%	3.5x
Clean Harbors, Inc.	CLH	\$58.11	97.7%	\$3,324	\$4,651	1.7x	11.9x	44.3x	NM	84.1x	49.6x	30.0%	4.1%	14.4%	3.3x
Darling Ingredients Inc.	DAR	\$15.13	95.0%	\$2,491	\$4,231	1.2x	8.3x	19.3x	24.4x	NM	22.2x	21.9%	4.4%	12.6%	3.6x
US Ecology, Inc.	ECOL	\$47.15	87.3%	\$1,027	\$1,290	2.7x	12.0x	19.4x	32.3x	30.4x	25.6x	30.4%	14.0%	22.6%	2.5x
Sharps Compliance Corp.	SMED	\$4.30	73.3%	\$69	\$66	1.8x	NM	NM	NM	NM	NM	31.1%	(2.2%)	1.4%	(6.0x)
Perma-Fix Environmental Services, Inc.	PESI	\$3.60	63.8%	\$42	\$51	1.0x	NM	NM	NM	NM	NM	19.2%	(3.8%)	4.4%	(0.1x)
Mean				\$2,372	\$3,414	1.9x	11.2x	25.3x	32.6x	44.8x	29.1x	29.5%	5.2%	12.9%	1.2x
Median				\$1,759	\$2,760	1.7x	12.0x		32.3x	30.4x	23.9x	30.2%	4.2%	13.5%	2.9x
High				\$7,276	\$10,193	2.9x	12.5x	44.3x	41.0x	84.1x	49.6x	44.5%	15.0%	22.6%	3.6x
Low				\$42	\$51	1.0x	8.3x	18.2x	24.4x	20.0x	19.2x	19.2%	-3.8%	1.4%	(6.0x)
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Source: Capital IQ

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LTM = Last Twelve Months

Industrial Services:

(\$ in millions, except per share data)															
						Valuation Multiples			PE Multiples			LTM Operating Margins			
Company		Share Price 04/30/2017	% of 52 Wk High	Market Capitalization	Enterprise Value	TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY17 P/E	CY18 P/E	Gross	EBIT	EBITDA	Net Debt/EBITDA
Covanta Holding Corporation	CVA	\$14.55	84.6%	\$1,909	\$4,565	2.7x	15.0x	46.6x	NM	NM	NM	30.9%	5.7%	17.9%	8.7x
CECO Environmental Corp.	CECE	\$11.29	75.9%	\$391	\$486	1.2x	8.7x	13.2x	NM	13.9x	12.3x	33.4%	9.1%	13.5%	1.5x
Heritage-Crystal Clean, Inc	HCCI	\$15.05	89.9%	\$346	\$374	1. lx	11.6x	26.4x	57.9x	29.2x	24.0x	24.8%	5.4%	10.5%	0.5x
Cypress Energy Partners, L.P.	CELP	\$8.78	61.5%	\$104	\$192	0.6x	13.0x	21.2x	NM	21.0x	21.1x	11.8%	2.9%	4.9%	7.8x
Ecology & Environment, Inc.	EE	\$10.63	94.9%	\$46	\$35	0.3x	6.9x	8.7x	35.8x	NM	NM	44.7%	4.0%	5.1%	(2.3x)
Fuel Tech, Inc.	FTEK	\$0.87	48.3%	\$20	\$9	0.2x	NM	NM	NM	NM	NM	35.9%	(25.1%)	(18.1%)	1.2x
Quest Resource Holding Corporation	QRHC	\$2.78	75.6%	\$42	\$46	0.3x	NM	NM	NM	NM	NM	8.4%	(4.1%)	(1.8%)	(1.8x)
Industrial Services of America, Inc.	IDSA	\$1.15	34.3%	\$9	\$15	0.4x	NM	NM	NM	NM	NM	5.8%	(4.1%)	1.2%	11.8x
Mean				\$358	\$715	0.8x	11.0x	23.2x	46.9x	21.3x	19.1x	24.5%	-0.8%	4.1%	3.4x
Me dian				\$75	\$119	0.5x	11.6x	21.2x	46.9x	21.0x	21.1x	27.8%	3.5%	5.0%	1.3x
High				\$1,909	\$4,565	2.7x	15.0x	46.6x	57.9x	29.2x	24.0x	44.7%	9.1%	17.9%	11.8x
Low				\$9	\$9	0.2x	6.9x	8.7x	35.8x	13.9x	12.3x	5.8%	-25.1%	-18.1%	(2.3x)

Source: Capital IQ

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

Select Mergers and Acquisitions & Capital Raising News

❖ Finance Authority of Maine to Provide Fiberight with \$45M Bond for WTE Plant

April 12, 2017 – In July 2016, The Maine Department of Environmental Protection issued permits to the state's Municipal Review Committee and Fiberight to build a new waste management plant in Hampden. Despite Penobscot Energy Recovery Company's appeal that challenged Fiberight's permits, construction of Fiberight's new \$69 million, 144,000-sq.-ft. waste-to-energy (WTE) facility began in October 2016. Now, Fiberight has been granted a \$45 million, tax-exempt bond from the Finance Authority of Maine to help construct and operate its new WTE facility, which will convert trash from more than 115 communities into biogas.

❖ Waste Harmonics Acquires Assets of Two Companies

April 20, 2017 – Victor, New York-based outsourced waste management services provider Waste Harmonics LLC has acquired the assets of Buffalo, New York-based SetWest Leasing and Rental Corp and Springfield, Ohio-based Eco2Go Recycling Solutions, LLC. SetWest, a waste management rental equipment provider, services a variety of private and public companies in the eastern U.S. Eco2Go is an environmentally responsible, mail-in solution for companies with low-volume recycling needs. With this solution, companies can redirect a variety of recoverable recyclables from the waste stream via Eco2Go's special containers

Select Industry News

* Can, Bottle Recycling Triples in Oregon After Recycling Rate Doubles to 10 Cents

April 4, 2017 – In an effort to get more residents to return cans and bottles, the State of Oregon has doubled the payout of recycled cans and bottles to 10 cents per can and bottle. During the first weekend of the increase, residents in the city of Medford brought in 30,000 recyclable bottles and cans for payout, triple the usual weekend amount. Due to the high volume of returns, staff members are claiming they are running out of money at several of the state's redemption centers.

San Antonio Recycling Plant Facing Trial After Missing Cleanup Deadline

April 4, 2017 – After facing numerous fines and violations, San Antonio shut down Ascent Recycling and Consulting in October. The plant was given a deadline to clean up. It has now blown past that deadline. To make matters worse, Zachary Walter, the owner of Ascent Recycling and Consulting, did not show up for a court date on Friday. He claimed he was in a car accident.

❖ Proposed Flint, Michigan Budget Includes Rate Increase for Waste Collection

April 5, 2017 – At the beginning of this week, Flint, Michigan Mayor Karen Weaver presented a proposed 2017-18 fiscal year budget for the City of Flint, which includes a potential \$27.36 per year rate increase for waste collection. The City Council members voted 7-0 in favor of the budget, pushing it forward to public hearings and scrutiny from the council before final approval. This proposed budget follows a long dispute over a waste contract that began in June 2016, when City Council members voted against Weaver's recommendation to award Rizzo Environmental Services with a five-year, \$17.5 million contract.

❖ Former Waste Hauler Owner Charged with Defrauding Massachusetts Landfill

April 5, 2017 – Stephen Aguiar, Jr., former owner-operator of Cleanway Disposal & Recycling in Westport, Massachusetts, has been charged with defrauding the operator of the Fall River Landfill of approximately \$473,000 in disposal fees. Between 2009 and 2014, Aguiar allegedly claimed he was disposing of waste from the Fall River Housing Authority, when he was really disposing of waste collected from private clients. The landfill operator allowed Fall River to dispose of the waste from the housing authority at no cost. Aguiar could face a maximum of 20 years in prison, three years of supervised release, a fine of \$250,000, restitution and forfeiture.

New Policy Could Require Apartments, Offices in Orlando, Florida to Offer Recycling

April 11, 2017 – At a recent City Council meeting in Orlando, Florida, a proposed policy that would require every residential and commercial building in the city to offer recycling was brought to the table. Currently, there is no recycling requirement in Orlando, and many residential and commercial properties were built with general garbage pickup in mind. With the new policy, building owners would have to create recycling centers within both new and existing buildings. The planning board is expected to consider the policy in June, and the City Council is slated to vote on the policy in August.

❖ Meridian Waste Solutions Posts \$31.7M in Revenue in 2016

April 19, 2017 – Meridian Waste Solutions Inc. reported its financial and operational results for 2016, which included \$31.7 million in revenue for the firm, growth of 135 percent compared to its 2015 results. The firm's revenue growth was driven by acquisitions, but it also achieved organic revenue growth of 7.6 percent. Its adjusted EBITDA amounted to \$7.9 million. Net loss for the 12 months ended December 31, 2016 decreased by \$1.5 million to \$17.7 million or \$13.95 per share, as compared to \$19.2 million or \$26.58 per share in the 12 months ended December 31, 2015. Previously acquired Christian Disposal and Eagle Ridge represented \$13.6 million and \$3.6 million in revenue respectively. Organic revenue growth of 7.6 percent was driven by additional customers and price increases. Gross profit improved by \$5.6 million to \$9.0 million in the 12 months ended December 31, 2016, as compared to \$3.4 million gross profit in the 12 months ended December 31, 2015. The 28.3 percent gross margin percentage for 2016 represents a 3.3 percent increase from 2015. The company says it is using the synergies of its recent acquisitions, such as creating density in some of its routes, which resulted in cost savings. In addition, there was a decrease in landfill costs as the company began internalizing its waste. Subsequent to the end of 2016, the firm completed a \$12.4 million public offering and was listed on NASDAO. For 2017 the firm is projecting revenue of \$63 million without any additional acquisitions. It also is projecting EBITDA of \$13 million.

❖ Oakland, California Sues Recycling Contractor for Overcharging Customers

April 26, 2017 – The city of Oakland, California, is suing its recycling contractor, California Waste Solutions (CWS), on allegations that it's overcharging customers for the service of pushing heavy recycling carts to the curb. According to the city, its contract with CWS claims that the service of moving recycling bins to the curb is supposed to cost \$27.85 a month for both single- and multi-family property owners, but CWS has allegedly been charging multi-family property owners between \$152.68 and \$776.16 per month. In an attempt to resolve this problem, the city has filed a lawsuit against CWS, asking the court to force CWS to stop overcharging customers and to reopen the city's recycling contract to include a missing line for "premium backyard service" for the movement of recycling carts at the rate of \$27.85 per month.

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

