



CRONUS

INVESTMENT BANKING

Environmental Services Industry Bulletin

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We recently had the opportunity to meet with Nate Morris, the Founder, Chairman and CEO of Rubicon Global headquartered in Atlanta, Georgia. Rubicon began operations in 2008 as an intermediary between technology, waste generators, and the waste collection and disposal industry. Nate explains the mission of the company is to end waste. Rubicon has raised substantial outside capital, but remains privately owned, and, while declining to share with us any revenue or profitability levels, claims to be the worldwide leader in sustainable, cloud-based waste and recycling solutions. Using its proprietary technology platform, the company provides comprehensive waste stream solutions that enable companies and governments to reduce expenses, increase recycling, and find economic value in their waste streams. Rubicon's goal is to create sustainable solutions for businesses, governments, and the planet.

Nate founded Rubicon in 2008 and serves as the company's Chairman and CEO. He is also the founder and chairman of Morris Industries, a private holding company focused on the application of technology to the industrial economy. He created the Morris Foundation, which works to improve the lives of Kentuckians through strategic philanthropy. Nate has been recognized as one of Fortune Magazine's *40 Under 40*, a Young Global Leader by the World Economic Forum, and is a member of the Council on Foreign Relations.

Cronus: *Nate, how did you get into the waste business and what attracted you to the industry?*

Nate: After college, I worked for the Kentucky Cabinet for Economic Development in China. I was shocked by the country's lack of infrastructure and technology around recycling and waste management. It reminded me of conversations I had with my childhood friend Marc Spiegel, whose family had been in the garbage business for generations. We always talked about the inefficiency of the waste industry. Soon after returning from China, Marc and I began developing our business model focused on evolving the industry and launched the company in our home state of Kentucky. Applying technology to this new economic model delivers value to our customers and finally gives them the opportunity to be more environmentally responsible simply by reevaluating their waste management provider and practices.

Cronus: *A perusal of your management team indicates a mix of waste and non-waste executives. Can you briefly describe how each, given their diverse backgrounds, play a role at Rubicon?*

Nate: I'm fortunate to be surrounded by a visionary management team with deep industry experience coming from the business, technology, sustainability and government worlds. Rubicon's President Kim Rumph is a proven business leader with significant experience running large businesses in a public company. Our CTO, Phil Rodoni was responsible for disrupting the antiquated insurance industry at Esurance. Michael Allegretti leads the company's rapidly growing RUBICONSmartCity business. Previously, Michael oversaw public policy for Uber Technologies and served as senior advisor to The Climate Group. David Rachelson spearheads the company's sustainability team. Prior to Rubicon, David was a key member of the Corporate Responsibility & Public Affairs department at InterContinental Hotels Group. Mary Trenchard leads the Customer Success team for Rubicon's enterprise customers. She has over twenty years of experience in customer relationship management for Fortune 500 companies including Home Depot, CVS, and Target. In addition, we have

investors like Marc Benioff, the founder of Salesforce, and Oscar Salazar, the founding CTO of Uber, who are invaluable resources for us as we grow.

Cronus: *As we understand it, Rubicon's goal is to reduce the cost of its clients' waste handling via being a value-added intermediary between them, the waste generators, and the service providers who collect and dispose of their waste. And, based upon your experience, Rubicon has been able to save its clients somewhere around 20% on their waste bill. For the most part, is such savings most likely to come from the costs of services charged by the major waste companies, such as Waste Management, Republic Waste, Waste Connections, just to name a few?*

Nate: Having followed the waste business for nearly forty years, you know that the traditional waste model is based on a capital-intensive truck and landfill business that is designed and conducted to utilize that fleet to its fullest extent and direct as much waste tonnage as possible to their landfills. In essence providing customers collection services, whether needed or not, and disposing of their waste into very high-margined landfills, the latter as opposed to recycling, where profitability can be less. Rubicon's revenue comes from aligning incentives with the customer around less landfilling, and more value-added services, which include our proprietary sustainability data tracking platform and zero waste training and education.

Cronus: *Setting disposal cost aside, how does a client save on its collection costs?*

Nate: Historically one-sided billing practices and inflated prices have been commonplace in the waste industry for years in the form of opaque trash bills and additional fees. Rubicon has a different business model and is not incentivized by increasing the number of pickups and sending waste to landfills. As a result, we can increase operational efficiency and uncover economic value in waste streams.

Cronus: *How is Rubicon compensated on the collection savings?*

Nate: We generally agree upon a gainshare model, and it varies based on factors like geography and material.

Cronus: *Does a major waste company ever reduce its collection price to be competitive with the small independent waste collector?*

Nate: The big waste companies have great sensitivity to changing stock prices. Management of those companies often advocate "pricing discipline," which means maintaining the highest price possible. Smaller waste companies often offer lower pricing as they typically operate leaner.

Cronus: *To lower a client's disposal costs, must more of its collected volume be diverted from disposal into recycling?*

Nate: In terms of recycling itself, we try to reuse as much as possible to reduce disposal volumes. We use our virtual waste assessment technology, RUBICONFlash, to help analyze the waste stream for recycling and diversion opportunities. With our technology and data

analytics, our independent waste haulers and recycling trucks, in essence, become roaming data centers that can highlight new recycling opportunities.

We believe that more recycling and reuse is the solution for a variety of reasons. It advances a circular economy that finds extended use for materials, and by its nature prevents the dire environmental degradation that occurs from placing those same materials in landfills. Our commitment to this vision also led us to develop the RUBICONMethod, a six-step guide to more successful recycling and waste reduction for business, governments and organizations. With technology and sustainability, we are changing the way the industry thinks about end destinations for waste.

Cronus: *And how is Rubicon compensated for disposal cost reduction?*

Nate: We take title to the recyclables – we like to control the feedstock – and are compensated on the profit above an agreed-upon sale price, but there is a floor price threshold for the recyclable material where we are still compensated. Rubicon is the first player in the industry to align incentives away from egregious hauling and excessive landfill usage. This alignment of incentives makes it possible for Rubicon to deliver incredible value to the customer as well as environmental benefits

Cronus: *Is it always the case that recycling costs less than disposal?*

Nate: Recycling generally costs less than landfilling for the most common commodities such as OCC (Old Corrugated Cardboard) and metals and fluctuates due to market area and other factors. As a company approaches zero waste, the costs vary for disposal of the hardest to place items. Oftentimes, companies committed to zero waste can achieve total savings, despite potential increases in the disposal of hard to place items, since the savings from the larger commodity streams and reduction in landfill volume outweigh any cost increases for other waste streams.

We believe that the future will deliver greater opportunities for recycling materials given the continued adoption of the circular economy by leading companies and cities. These entities are committed to circular solutions for their waste streams since they recognize value in discarded materials as feedstock for supply chains, as opposed to burying those materials in landfills in perpetuity. As a result, demand for new processing facilities and solutions are increasing, and Rubicon's business model is ideally situated to transport this material and provide transparency and data analytics about where opportunities for further diversion exist in waste streams.

Cronus: *As of late, China has restricted the importation of recycled materials. While we understand some recyclables are still being imported into China via a convoluted route from Southeast Asia, has Rubicon been impacted?*

Nate: China's ban on foreign waste has significantly affected the U.S. recycling industry, but now is not the time to waive local recycling rules, nor for companies to back away from ambitious recycling and zero waste goals. Instead, now is the time for communities and businesses across the country to adopt the kind of best practices that will prevent tons of

recyclable materials from needlessly going into landfills. We developed the RUBICONMethod, a simple, systematic program for recycling that leads to greater sustainability, always with an eye towards processes that are economically viable and environmentally beneficial to help cities, companies, and households recycle successfully. Rubicon's team of solutions and commodities experts are continually monitoring this situation and leveraging the company's scale, volume, and industry relationships to mitigate negative impacts to our customers.

Cronus: *It thus appears that it has been and will continue to be a conflicting relationship between the major waste companies and Rubicon, given the way the majors do business and the way Rubicon works with its customers, the waste generators.*

Nate: Rubicon's technology platform seamlessly connects our clients, the waste generators, to our network of over 5,000 independent haulers and recyclers, and to the end destinations, to get the job done, thus eliminating the need for driver interaction to confirm service completion, which saves time for everyone involved. Moreover, our RUBICONSelect purchasing consortium helps to save our independent haulers money by providing them discounts on everything from tires to financing to equipment. And with new software products that we have developed specifically for government sanitation operations, namely RUBICONSmartCity, we are approaching all aspects of the industry – waste generators, haulers and government – as our partners. We are proud of the role we are playing to evolve the industry towards more technological innovation, more sustainability driven-decision-making, and more partnership development.

Cronus: *Can a small independent hauler be as reliable as a service provider as the majors, and do you have a vetting process to determine their qualifications?*

Nate: We do a very thorough job of qualifying our network of independent waste collectors. Rubicon only works with haulers and recyclers that meet the highest standards and are strategically positioned to provide the best solutions for our customers. Each vendor is properly insured, acts in line with our customers' goals, and has their performance monitored on a scorecard. Vendor performance is continuously measured and analyzed to ensure the best service for our customers. Rubicon gives preference to vendors that offer recycling and have made sustainable business choices. Delivering great service is about great people, great technology and great business practices. Our network is best in class across all three of these verticals.

Cronus: *So, is the give up for the small waste collector lower profitability for higher volume?*

Nate: We are absolutely providing the haulers with higher volumes, but it goes far beyond that. Rubicon enables its network of independent haulers to compete for national accounts that they historically would not been able to access. Additionally, these collectors are adding new small and medium-sized customers without the need for an in-house salesforce, realize cost savings on equipment and financing through our RUBICONSelect purchasing consortium, and run more efficiently through our hauler technology platform, RUBICONPro. Our technology enables our local, independent haulers to optimize their pickup routes, gain access to new customers and report pickup confirmation.

Cronus: *And, the profitability?*

Nate: We recognize how challenging it can be for independent haulers to compete and that is a main reason why we created our purchasing consortium, RUBICONSelect. RUBICONSelect provides our independent haulers with enterprise-level pricing and discounts on resources that they need to run their businesses, from tires to fuel discounts and more. These strategic relationships with companies like Michelin Tires, ACE Equipment and Fleetcor help our network of independent members reduce their overhead, lower costs and grow their business.

Cronus: *What are the benefits to the small waste collectors as it relates to recycling?*

Nate: Demand for non-landfill solutions are rapidly growing due to the mounting focus on creating a more circular economy, so small haulers need to 'future proof' themselves by offering greater recycling services. Rubicon's model empowers these haulers by providing them with cutting-edge technology and a growing customer base to haul more recyclables. Our goal is to be a huge advocate for the independent waste hauler and help them prepare for a future without landfills. We treat our haulers and recyclers as partners and members of our family. We are incredibly energized about the long-term impact we can make together and will continue to innovate and focus on opportunities to help.

Cronus: *Turning to the larger picture, can we discuss RUBICONSmartCity?*

Nate: Rubicon's smart city solution includes a patented, proprietary technology to improve the efficiency and effectiveness of municipal waste and recycling systems which lends itself to better policy decisions. RUBICONSmartCity technology has been rolled out to over 25 cities across the U.S., including Atlanta, Georgia; Montgomery, Alabama; Santa Fe, New Mexico; Tyler, Texas and recently West Memphis, Arkansas.

The impact of our work in cities has already been felt. For example, in the City of Atlanta where our technology is deployed across the City's entire fleet of residential solid waste, recycling and yard waste trucks, we have seen positive impacts related to landfill diversion, contamination reduction, operational efficiency gains, and cost savings. Over the course of the pilot, Rubicon and the City reduced the amount of recyclables going to landfills by 83%, equaling 355 tons of recyclable material that was kept out of landfills. Together, Rubicon and the City also made changes to waste and recycling operations that delivered savings of 4,752 MTCO₂e, the equivalent of avoided greenhouse gas emissions from 1,656 tons of waste recycled instead of landfilled, or 237 garbage trucks full of waste being recycled instead of landfilled. Finally, Rubicon identified route optimizations that would reduce route hours by approximately 6% per week and reduce mileage by nearly 8% per week, equaling an annualized reduction of 56,000 miles or 5.5 hours per week.

Rubicon is proud to be a first mover in the waste and recycling space as part of the broader smart cities movement and recently announced a partnership with Amazon Web Services Marketplace. This marketplace will allow cities to procure RUBICONSmartCity with the click of a mouse.

Cronus: *And, how does Rubicon benefit from these municipal programs?*

Nate: Following a short pilot phase, we generate revenue from our city product through a Software as a Service (SaaS) model.

Cronus: *Can RUBICONSmartCity eventually encompass the commercial and industry segment of the waste business in the city?*

Nate: Yes, as evidenced by our partnership with the City of Santa Fe.

Cronus: *At this juncture, do you have any viable competitors in the U.S.? We note Recycle Track Systems, a two-year old start up, just raised \$11.7 million in private equity.*

Nate: Rubicon is a technology company, so we see competitors from all areas.

Cronus: *Returning to recycling, you indicated that with more regulation there will be more recycling. Can you elaborate? Also, we would have thought it takes more than regulation – rather, cheaper recycling methods to generate more recycling.*

Nate: Due to the proliferation of landfills and their entrenchment in the industry, regulation can help to spur the initial investment and demand necessary for recycling solutions to gain traction as a viable alternative. In turn, the cost to recycle naturally reduces with the increase in the number of recycling processing facilities, which then unwinds the need for the regulation.

Cronus: *Have your R&D efforts in recycling generated any new recycling techniques? You once observed that recycling in general has not been innovative. Are your R&D efforts part and parcel with that comment?*

Nate: Although Rubicon is evolving the industry through its proprietary technology and data analytics, we believe the company's longer-term future lies in recycling in the broadest sense, and developing markets and end users for the entire waste stream. To help us make this vision a reality, Rubicon partners with thought leaders such as the Wharton School's Initiative for Global Environmental Leadership (IGEL) and TRUE Zero Waste of which Rubicon is a founding member. Additionally, Rubicon is one of the first Certified B Corporations and was recently recognized by the governing body of B Corp as "Best for the Environment" and "Best for Governance."

Cronus: *Does Rubicon's earlier pronouncements that it could achieve 100% recycling by 2022 still seem realistic?*

Nate: Rubicon's mission is to end waste. It is no easy task, but we are confident that together with our customers, partners, and fellow thought leaders we can make a future without landfills a reality.

Cronus: *Rubicon has raised approximately \$285 million since its inception. Are there plans for going public or will another private placement be the next financing route?*

Nate: Our focus remains on building and growing our business. We continue to strengthen our systems, retain and recruit the best employees and leadership team, and deepen our

relationships with current and new customers. Striking the right balance between maturing our company and continuing to be a nimble and innovative organization is the work that I focus on each and every day at Rubicon.

Cronus: *Understanding Rubicon is private and does not disclose financials, we assume much of the company's revenue mix is made up of recurring revenues, so should create a lot of value for its owners. In the long run, from a financial perspective, will Rubicon look more like a technology company or more like a waste management company? Also, can you indicate to our readers whether Rubicon has reached profitability yet, or does the company need to continue to scale into profitability?*

Nate: Rubicon is a technology company that thinks of the waste and recycling industry entirely differently. We have brought a new vigor and energy into the space, all tied back to an innovative technology platform that is changing the waste and recycling industry forever. Fifty years from now when the industry has incorporated artificial intelligence and robotics and deeper technology, people will look back and say that Rubicon was the catalyst that did it all and this industry is entirely different and better because of Rubicon.

Cronus: *Without doubt, Rubicon's approach to the waste business is both unique and innovative, perhaps making it the most interesting company in the waste industry today. Thank you and good luck in the future.*



Of Note: *In 2018, Rubicon made a series of strategic acquisitions that the company started talking about briefly, preferring to focus less on the publicity of those acquisitions and more on the successful integration and attention to its customers. In 2018, Rubicon acquired Computerized Waste Systems (CWS), the waste services division of WestRock and Charter Waste Management, Inc., parent company of RiverRoad Waste Solutions, Inc. We had to ask Nate as one of our final questions what these acquisitions mean to Rubicon.*

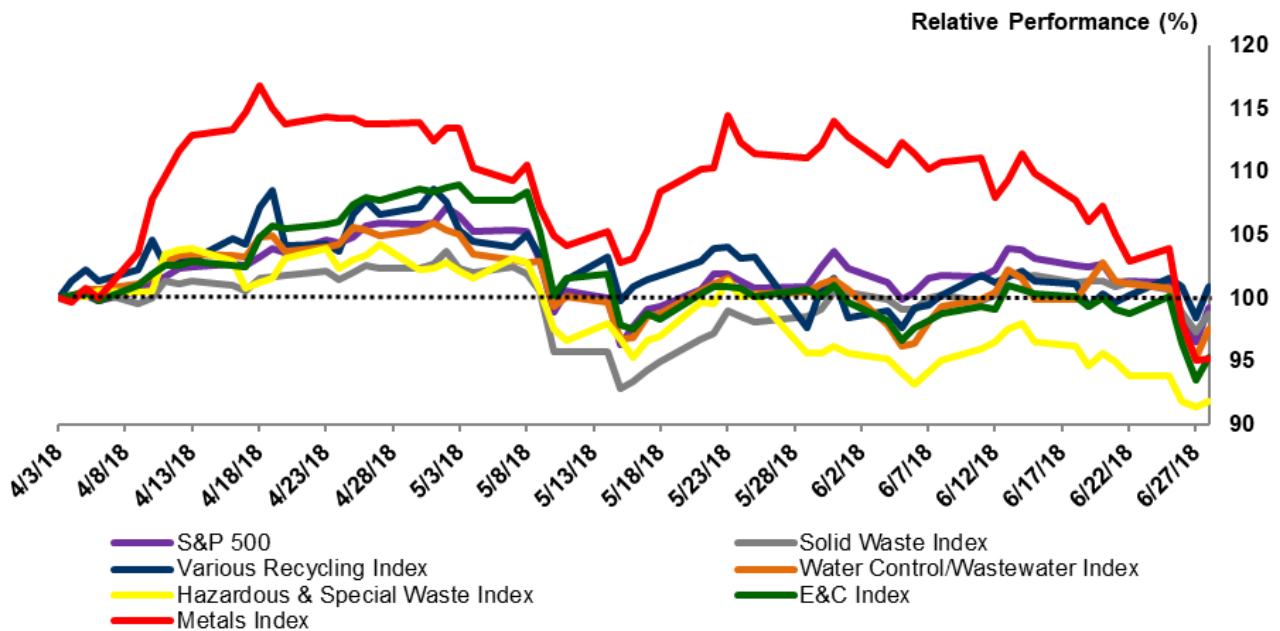
Nate: I stated earlier how first and foremost Rubicon is a technology company that thinks of the waste and recycling industry differently than any of the older waste companies. These acquisitions fit directly into what we are trying to achieve as a company. It is much different than some other waste company buying these companies because we are able to pull these customers onto our technology platform. The traditional industry model of waste lifecycle management has been about securing accounts, that is all. There is no platform, no interconnectivity, no deeper value-add. Rubicon changes all of that, and changes all of that for these customers through these acquisitions. We are building a national and international platform, based on our technology products and sustainable solution that actually move the needle. So, this was an opportunity for us to use volume in a way that allows us to deploy our technology faster and provide a world class customer experience.

For more information on Rubicon and its processes, please contact Cronus Partners:

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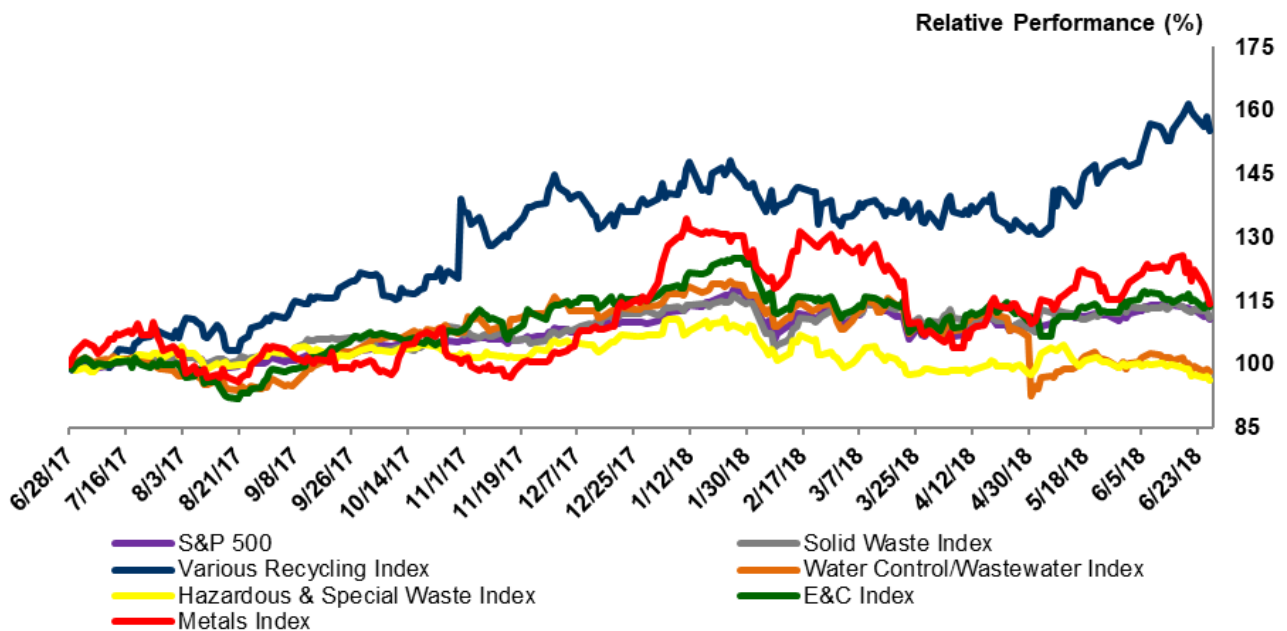
ENVIRONMENTAL SERVICES INDUSTRY: TRADING STATISTICS

Q2 2018 Market Performance (Market Cap Weighted)



Source: FactSet Research Systems Inc. as of 6/28/2018

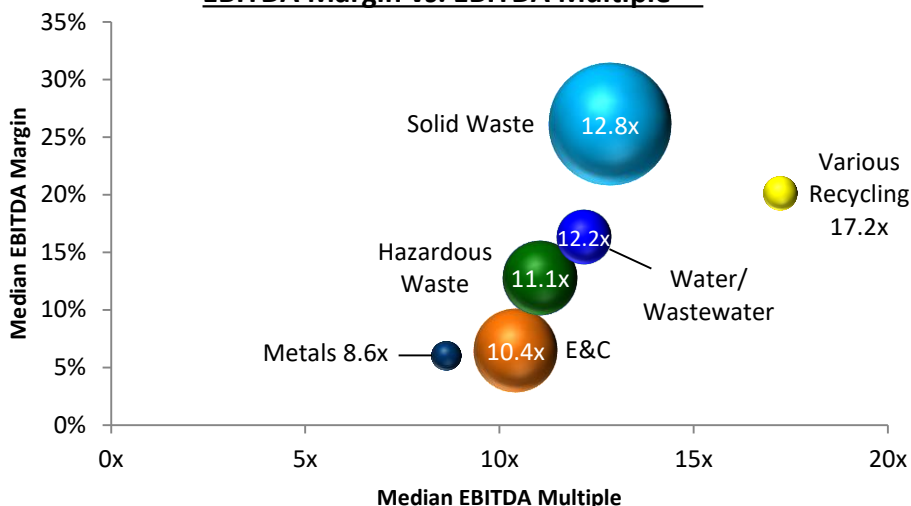
LTM Market Performance (Market Cap Weighted)



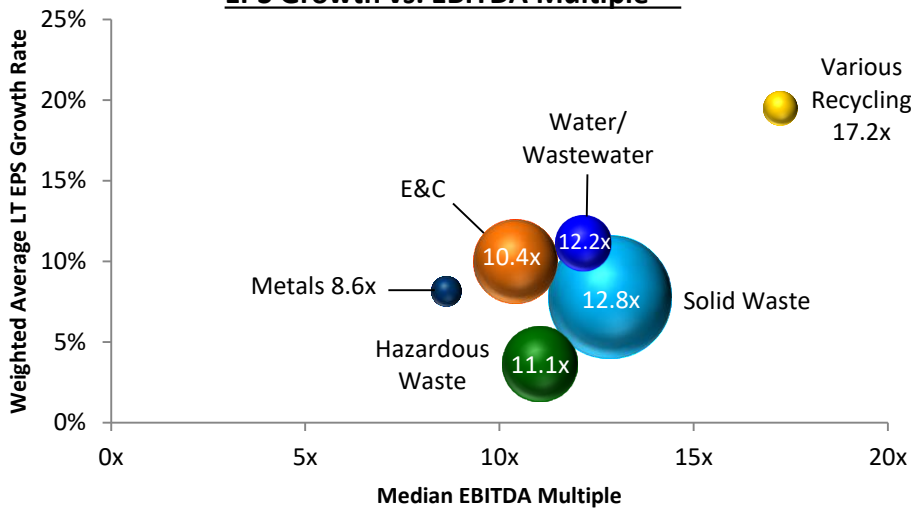
Source: FactSet Research Systems Inc. as of 6/28/2018

ENVIRONMENTAL SERVICES INDUSTRY: VALUATION FACTORS

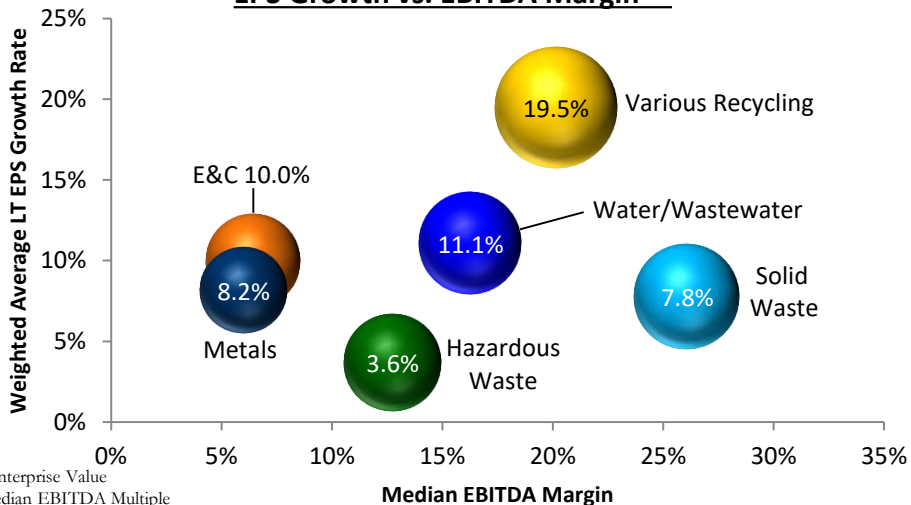
EBITDA Margin vs. EBITDA Multiple ⁽¹⁾



EPS Growth vs. EBITDA Multiple ⁽¹⁾



EPS Growth vs. EBITDA Margin ⁽²⁾



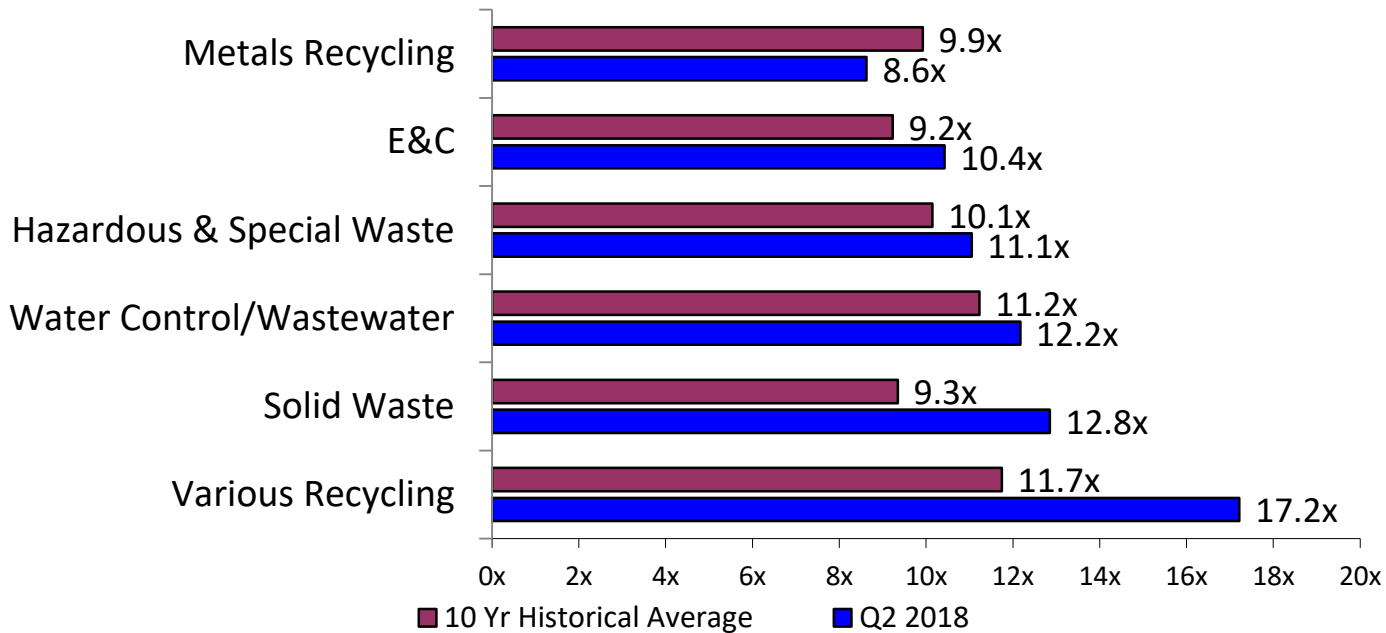
⁽¹⁾ Balloon size represents Total Enterprise Value

⁽²⁾ Balloon size corresponds to Median EBITDA Multiple

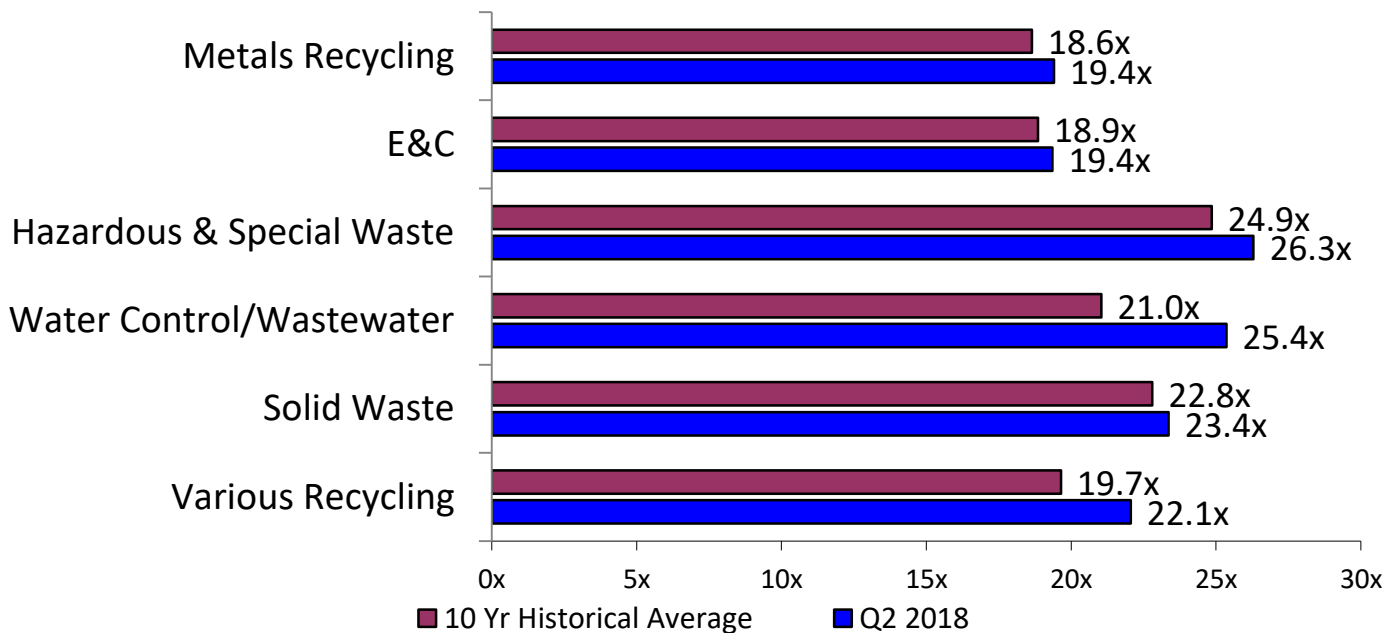
Source: FactSet Research Systems Inc. as of 6/28/2018

ENVIRONMENTAL SERVICES INDUSTRY: HISTORICAL COMPARISON

Median EV / LTM EBITDA (Q2 2018 vs. 10 Year Average)



Price / LTM Earnings (Q2 2018 vs. 10 Year Average)



Environmental Services Public Company Valuations

| Company | Ticker | Share Price | Market Cap | Enterprise Value (EV) | LTM | | 2018 Expected | |
|----------------------------------|--------|-------------|------------|-----------------------|-------------|------------|---------------|------------|
| | | | | | EV/ Revenue | EV/ EBITDA | EV/ Revenue | EV/ EBITDA |
| Solid Waste | | | | | | | | |
| Waste Management Inc | WM | \$84.25 | \$36,428 | \$48,190 | 3.3 x | 11.8 x | 3.1 x | 11.0 x |
| Republic Services Inc | RSG | 70.19 | 23,017 | 31,780 | 3.2 | 11.6 | 3.1 | 10.9 |
| Waste Connections Inc | WCN | 78.13 | 20,585 | 24,100 | 5.1 | 16.6 | 4.8 | 15.1 |
| Advanced Disposal Services, Inc. | ADSW | 17.40 | 2,276 | 4,094 | 2.7 | 10.7 | 2.6 | 10.7 |
| Covanta Holding Corp | CVA | 25.54 | 2,262 | 4,610 | 2.5 | 14.7 | 2.5 | 9.6 |
| Casella Waste Systems Inc | CWST | 25.54 | 1,090 | 1,662 | 2.7 | 13.9 | 2.5 | 11.4 |
| | | | | Median | 2.9 x | 12.8 x | 2.8 x | 10.9 x |
| Various Recycling | | | | | | | | |
| Trex Co Inc | TREX | \$65.54 | \$3,858 | \$3,856 | 6.5 x | 23.2 x | 6.0 x | 20.9 x |
| Darling Ingredients Inc | DAR | 20.04 | 3,300 | 5,012 | 1.4 | 11.2 | 1.3 | 10.5 |
| | | | | Median | 3.9 x | 17.2 x | 3.7 x | 15.7 x |
| Water Control / Wastewater | | | | | | | | |
| Pentair plc | PNR | \$42.85 | \$7,644 | \$9,490 | 1.9 x | 9.4 x | 2.8 x | 14.0 x |
| Ashland Inc | ASH | 81.11 | 5,062 | 7,568 | 2.1 | 14.5 | 1.9 | 10.4 |
| ITT Inc | ITT | 52.32 | 4,573 | 4,672 | 1.8 | 9.8 | 1.5 | 8.8 |
| Lindsay Corp | LNN | 94.92 | 1,021 | 989 | 1.8 | 16.4 | 1.8 | 14.2 |
| | | | | Median | 1.8 x | 12.2 x | 1.8 x | 12.2 x |
| Hazardous & Special Waste | | | | | | | | |
| Veolia Environnement SA | VEOEY | \$22.56 | \$12,711 | \$23,340 | 0.8 x | 7.6 x | 0.8 x | 6.0 x |
| Stericycle Inc | SRCL | 68.35 | 5,849 | 8,722 | 2.4 | 11.8 | 2.4 | 11.2 |
| Clean Harbors Inc | CLH | 57.01 | 3,203 | 4,567 | 1.5 | 10.3 | 1.4 | 9.7 |
| US Ecology Inc | ECOL | 66.55 | 1,460 | 1,700 | 3.3 | 16.7 | 3.1 | 13.4 |
| Heritage-Crystal Clean Inc | HCCI | 19.85 | 457 | 516 | 1.4 | 13.4 | 1.1 | 9.8 |
| Newalta Corp | NAL.TO | 0.96 | 84 | 361 | 1.9 | 9.5 | 1.8 | 8.5 |
| | | | | Median | 1.7 x | 11.1 x | 1.6 x | 9.7 x |
| Engineering and Consulting | | | | | | | | |
| Jacobs Engineering Group, Inc. | JEC | \$65.59 | \$9,300 | \$11,310 | 1.0 x | 18.8 x | 0.7 x | 10.4 x |
| Fluor Corp. | FLR | 48.89 | 6,873 | 7,027 | 0.4 | 12.2 | 0.4 | 9.3 |
| AECOM | ACM | 32.34 | 5,185 | 8,521 | 0.4 | 11.4 | 0.4 | 8.1 |
| EMCOR Group, Inc. | EME | 76.63 | 4,479 | 4,436 | 0.6 | 10.6 | 0.6 | 9.5 |
| MasTec, Inc. | MTZ | 51.35 | 4,132 | 5,239 | 0.8 | 9.4 | 0.8 | 7.5 |
| Tetra Tech, Inc. | TTEK | 60.00 | 3,337 | 3,630 | 1.3 | 15.0 | 1.7 | 14.5 |
| McDermott International, Inc. | MDR | 18.22 | 3,276 | 3,350 | 1.1 | 7.4 | 0.4 | 4.6 |
| Stantec, Inc. | STN | 26.04 | 2,968 | 3,480 | 1.4 | 13.2 | 1.3 | 11.5 |
| KBR, Inc. | KBR | 18.90 | 2,658 | 2,844 | 0.7 | 6.4 | 0.6 | 7.3 |
| Arcadis NV | ARCAV | 17.20 | 1,531 | 1,971 | 0.5 | 8.4 | 0.5 | 6.7 |
| Aegion Corp. | AEGN | 25.59 | 829 | 1,110 | 0.8 | 10.4 | 0.8 | 9.1 |
| IES Holdings, Inc. | IESC | 17.30 | 367 | 363 | 0.4 | 12.9 | NA | NA |
| Orion Group Holdings, Inc. | ORN | 8.52 | 241 | 303 | 0.5 | 9.3 | 0.5 | 7.4 |
| Goldfield Corp. | GV | 4.30 | 109 | 114 | 1.0 | 6.8 | NA | NA |
| Ecology & Environment, Inc. | EEL | 13.40 | 58 | 44 | 0.4 | 8.2 | NA | NA |
| | | | | Median | 0.7 x | 10.4 x | 0.6 x | 8.6 x |
| Metals Recycling | | | | | | | | |
| Commercial Metals Co | CMC | \$21.85 | \$2,557 | \$3,160 | 0.6 x | 13.1 x | 0.6 x | 8.0 x |
| Sims Metal Management Ltd | SMSMY | 11.29 | 2,288 | 2,217 | 0.5 | 8.6 | 0.5 | 7.3 |
| Schnitzer Steel Industries Inc | SCHN | 35.45 | 955 | 1,061 | 0.5 | 6.6 | 0.5 | 5.4 |
| | | | | Median | 0.5 x | 8.6 x | 0.5 x | 7.3 x |

Source: FactSet Research Systems Inc. as of 7/12/2018. Amounts in millions USD, except share price

Select Environmental Services Mergers & Acquisitions Activity

| Date | Target | Acquirer | Target Location | Target Description |
|--------|--|---|-----------------|---|
| Aug-18 | RiverRoad Waste Solutions | Rubicon Global | New Jersey | A waste brokerage firm that brokers agreements between businesses and waste removal companies. |
| Jul-18 | Nuterra SE FL Organics LLC | Denali Water Solutions LLC | Florida | Provides biosolid and organic waste composting services. |
| Jul-18 | Dupage Disposal, Inc. | Lakeshore Recycling Systems LLC | Illinois | Provides waste management service such as recycling and disposal services. |
| Jul-18 | American Water Works Co. | Veolia North America LLC | New Jersey | Provides contract authoring execution. |
| Jul-18 | Freedom Waste Service LLC | WCA Waste Corp.; Macquarie Infrastructure Partners, Inc. | Kentucky | Provides waste management services including roll off, front load, residential and compactor. |
| Jul-18 | Mustang Energy Services, Inc. | Blue Wolf Capital Partners LLC | Texas | Provides lining & containment solutions, on-site management, installation, and in-field fabrication. |
| Jul-18 | LoneStar Ecology LLC | Kinderhook Industries LLC; Intergulf Corp. | Texas | Operates as a centralizes water treatment facility providing waste water treatment services. |
| Jun-18 | Envirosystems, Inc. | Revolution Environmental Solutions LP | Nova Scotia | Provides industrial services and waste management services. |
| Jun-18 | NRC Group Holdings, LLC | Hennessy Capital Acquisition Corp. | New York | A global provider of comprehensive environmental, compliance and waste management services. |
| Jun-18 | Invisible Waste Services LLC | Harvest Partners LP; Valet Waste LLC; Ares Private Equity Group | Michigan | Provides doorstep collection and recycling services. |
| Jun-18 | ProAct Services | Evoqua Water | Michigan | Provider of on-site treatment services of contaminated water. |
| Jun-18 | USA Services of Florida, Inc. | Sweeping Corporation of America, Inc.; Soundcore Capital Partners LLC | Florida | Specializing in roadway transportation and construction related projects. |
| Jun-18 | Miele Sanitation Co. | Interstate Waste Services, Inc.; HWStar Holdings Corp. | New Jersey | Provides non-hazardous solid waste collection, transfer, recycling and disposal services. |
| Jun-18 | Prime Portables, Inc. | Lakeshore Recycling Systems LLC | Illinois | Provides services related to the rental of portable restrooms. |
| May-18 | Environmental Soil Management, Inc. | Clean Earth, Inc. | New York | Recycles contaminated soil. |
| May-18 | Terra Renewal Services, Inc. | American Residuals Group LLC | Arkansas | Provides wastewater residual management services, dewatering, and emergency response. |
| May-18 | SWS Environmental Services | National Response Corporation (NRC) | Texas | Provides services such as hazardous waste management, emergency response, and remediation services. |
| May-18 | Progressive Environmental Services, Inc. | JF Lehman & Co., Inc.; National Response Corp. | Texas | Provides maintenance and remediation services such as site remediation, demolition, and waste management. |
| Apr-18 | FPM Group Ltd. | Olgoonik Development LLC | New York | Engages in provision of environmental remediation and construction management services. |
| Apr-18 | Turner Ranches Water & Sanitation Co. | Global Water Resources, Inc. | Arizona | Provides irrigation and sanitary services. |
| Apr-18 | Meridian Waste | Warren Equity Partners, LLC | Georgia | Provides solid waste collection, transportation, recycling and disposal services. |
| Apr-18 | A-1 Environmental Services | G&F Septic Service, Inc. | Maine | Provides septic tank pumping, roll-off container & dumpster rental and portable toilet and sink rentals. |
| Apr-18 | LiquiForce Services (Ontario), Inc. | Granite Construction, Inc. | Ontario | Provides mainline and lateral sewer rehabilitation services. |
| Apr-18 | AVR Resource Group | Advanced Hydraulic Systems, Inc. | New Jersey | Provides waste management consulting services. |

Source: FactSet Research Systems Inc. as of 8/1/2018

Select Environmental Services Mergers & Acquisitions Activity

| Date | Target | Acquirer | Target Location | Target Description |
|--------|---|---|------------------|--|
| Mar-18 | Right Away Disposal LLC | Waste Connections, Inc. | Arizona | Provides waste and recycling services, offering toilets and event waste, residential, and frontload services. |
| Mar-18 | Geo-Synthetics Systems LLC | Babcock Power Environmental Inc. | Wisconsin | Installs geosynthetic materials for industries such as energy, waste disposal, agricultural, and industrial. |
| Mar-18 | Tayman Industries, Inc | Republic Services, Inc. | California | Offers waste removal and trash collection services. |
| Mar-18 | Sea/Sue, Inc. | Waste Management, Inc. | California | Provides solid waste and recycling collection services. |
| Mar-18 | Export Metals LLC | Liberty House Group | Florida | Provides exporting and recycling services. |
| Mar-18 | EnviroSolutions, Inc. | Waste Management, Inc. | Virginia | Provides solid waste collection, industrial waste disposal, and recycling services. |
| Mar-18 | MKC Enterprises, Inc. | Clean Earth, Inc.; Compass Group Management LLC | Georgia | Provides waste disposal solutions. |
| Mar-18 | Newalta Corp. | Tervita Corp. | Alberta | Provides environmental solutions that reduce disposal and recover resources from industrial residues. |
| Mar-18 | Smithrite Disposal Ltd. | GFL Environmental, Inc. | British Columbia | Provides waste disposal and recycling solutions. |
| Mar-18 | EnviroServe JV LP | Savage Services Corp. | Ohio | Provides remediation, removal, packaging, transportation, and disposal of hazardous wastes. |
| Feb-18 | Acton Concord Septic, Inc. | Gryphon Investors, Inc.; Wind River Environmental LLC | Massachusetts | Provides septic services including septic pumping, septic system installations and small repairs. |
| Feb-18 | CHEP Recycled Pallet Solutions LLC | Grey Mountain Partners | Georgia | Manages, maintains, transports, and supplies pallets, containers, RPCs, bins, trays and store displays. |
| Feb-18 | Deep Foundations Contractors, Inc. | GFL Environmental, Inc. | Ontario | Provides solid waste, infrastructure, soil remediation and liquid waste management services. |
| Feb-18 | Buckhorn Energy Services LLC | BNN Water Solutions LLC | Colorado | Provides oilfield waste treatment and disposal services (i.e. waste disposal and gathering systems solutions). |
| Feb-18 | V.I.P Waste Services, LLC | Harvest Partners LP; Valet Waste LLC; Ares Private Equity Group | Ohio | Provides door-to-door trash pickup services in residential communities. |
| Feb-18 | Wastequip LLC | H.I.G. Capital LLC; Dyal Capital Partners; Wastequip LLC | North Carolina | Manufactures waste handling and recycling equipment, and offers solutions for managing waste. |
| Jan-18 | Gold Medal Services LLC | Kinderhook Industries LLC; Bio Hi Tech America LLC; Gold Medal Services LLC | New Jersey | Waste and recycling services company for corporations, industries, businesses, municipalities, and residences. |
| Jan-18 | Gopher Resource LLC | Energy Capital Partners LLC | Minnesota | Provides national environmental solutions such as recycling services, solutions, and battery recycling. |
| Jan-18 | Waste Control Specialists LLC | JF Lehman & Co., Inc.; JFL-WCS Partners LLC | Texas | Provides waste recycling services such as processing, storing, and disposing hazardous wastes. |
| Jan-18 | PurLucid Treatment Solutions (Canada), Inc. | MGX Minerals, Inc. | Alberta | Provides water treatment solutions such as waste treatment, residuals management, and oil & gas services. |
| Jan-18 | Veolia North America LLC | Clean Harbors, Inc. | Massachusetts | Provides industrial cleaning services. |
| Jan-18 | Quantex Environmental, Inc. | Covanta Environmental Solutions LLC | Ontario | Provides environmental processing services. |
| Jan-18 | Green Fence Recycling Corp. | GEO JS Tech Group Corp. | South Carolina | Provides plastic recycling services. |
| Jan-18 | Wilson Waste Systems LLC | Meridian Waste Missouri LLC | Missouri | Provides waste removal services. |

Source: FactSet Research Systems Inc. as of 8/1/2018

Select Environmental Services Mergers & Acquisitions Activity

| Date | Target | Acquirer | Target Location | Target Description |
|--------|---|--|------------------|--|
| Jan-18 | Mid Bronx Haulage Corp. | Action Carting Environmental Services, Inc. | New York | Provides waste management services. |
| Jan-18 | Complete Disposal Co., Inc. | Casella Waste Systems, Inc. | Massachusetts | Integrated solid waste services. |
| Jan-18 | Basin Wastewater Solutions LLC | Stallion Oilfield Services Ltd. | Idaho | Provides water services, system design, maintenance recommendation, and engineering design. |
| Jan-18 | Production Management Industries LLC | Tiger Rentals Group LLC | Louisiana | Provides remediation, industrial cleaning, and environmental services. |
| Jan-18 | Cascade Water Services, Inc. | Ecolab, Inc. | New York | Provides water treatment, environmental services, cleaning, cooling tower repair, and laboratory services. |
| Dec-17 | JWC Environmental LLC | Sulzer AG | California | Designs and supplies wastewater solids reduction equipment (i.e. sludge processing and septage systems). |
| Dec-17 | Liquid Environmental Solutions Corp. | Audax Private Equity | Texas | Non-hazardous liquid waste collection and treatment company servicing transportation and disposal of waste. |
| Dec-17 | A Company Inc. | United Site Services, Inc. | Idaho | Provides portable sanitation services at construction sites, public events, and other social gatherings. |
| Dec-17 | Enertrac, Inc. | Wesroc Monitoring Solutions | Nebraska | Provides tank monitoring solutions such as integration, implementation, consulting and managed services. |
| Dec-17 | Advanced Lignin Biocomposites LLC | Attis Innovations LLC | Minnesota | Provides solid waste management services. |
| Nov-17 | HMT, Inc. | Tailwind Management LP | Texas | Provides above-ground storage tank solutions such as tank repair, maintenance, and installation services. |
| Nov-17 | Delmar Disposal Co., Inc. | TAS Environmental Services LP; TEAM Partners LLC | Texas | Provides industrial waste management services such as tank cleaning and servicing fuel spills. |
| Nov-17 | Compaction & Recycling Equipment, Inc. | Deep Green Waste & Recycling, Inc. | Oregon | Designs and supplies solid waste handling systems. |
| Nov-17 | Mansbach Metal Company | Columbus Recycling (Trivest Partners) | Kentucky | Recycles ferrous, nonferrous and shreddable materials. |
| Nov-17 | DC Trash of Illinois, Inc. | Lakeshore Recycling Systems LLC | Illinois | Offers waste removal services including trash removal, recycling and dumpster rental. |
| Nov-17 | Value Stream Environmental Services LLC | Liquid Environmental Solutions Corp. | Arkansas | Provides grease trap services and used cooking oil recycling services. |
| Nov-17 | 3k Oil Services Ltd. | Tervita Corp. | Saskatchewan | Handles upstream oil waste facilities; operates ecology pit, waste and reclamation facility, and oil waste landfill. |
| Nov-17 | ERS International | ReECO Tech Conversion Technologies Ltd. | Ontario | Provides electronics recycling solutions, upcycling technologies, and asset remarketing/recovery services. |
| Oct-17 | DBI Recycling LLC | Industrial Container Services LLC | Michigan | Engages in the waste materials business. |
| Oct-17 | VLS Recovery Services LLC | Aurora Capital Group LP | Texas | Provides waste management services, waste treatment and recycling, and interior railcar and container cleaning. |
| Oct-17 | Columbia Recycle (1996) Ltd. | Tervita Corp. | British Columbia | Provides metal recycling services. |
| Oct-17 | Strategic Materials, Inc. | Littlejohn & Co. LLC | Texas | Sells recycled glass and plastic products (i.e. containers, fiberglass, fillers, specialty glass and plastics). |
| Sep-17 | Iron City Express, Inc. | GPB Waste OH LLC | Pennsylvania | Provides hauling and disposal services such as roll-off and tractor-trailer container rentals. |
| Aug-17 | HGC Management, Inc. | Canada Fibers Ltd. | Ontario | Specializes in waste and recycling, plant design, and construction. |

Source: FactSet Research Systems Inc. as of 8/1/2018

Advising on mergers, acquisitions, divestitures, sales, and private placement financings, Cronus is an independent investment banking firm that provides financial advisory and other investment banking services. Winner of the New York Association for Corporate Growth's Boutique Investment Bank of the Year Award, the firm has significant experience in advising both public and private companies that can benefit from middle-market transactions. Cronus serves industrial-based sectors including environmental services, specialty manufacturing, and business-to-business services.

Environmental Services Industry Coverage

Solid Waste and Construction and Demolition Waste; Hazardous and Industrial Waste; Recycling; Waste Transportation; Alternative Energy; Water; Air



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Recent Select Cronus Environmental Services Transaction



In March 2018, Babcock Power Environmental, a subsidiary of Babcock Power Inc., announced the acquisition of substantially all of the assets of Geo-Synthetics, LLC. Cronus acted as financial advisor to Babcock in the transaction, identifying the target company, initiating contact, intermediating discussions, and advising our client on key terms including valuation.

Target Profile

Geo-Synthetics is a distributor, fabricator, and installer of geosynthetic materials for a broad range of erosion control and containment applications.

Acquirer Profile

Babcock provides fully integrated environmental solutions for utility power plants, waste-to-energy facilities, and large industrial applications worldwide.

Transaction Rationale

Geo-Synthetics is a long-established independent geo-synthetic lining installer. Babcock Power intends to leverage its relationships in the power generation sector to provide additional services to its current utility customer base, particularly providing additional services regarding the management of coal combustion residuals, a significant issue for coal burning utilities in the wake of recent changes to environmental regulations.