LAKESHORE RECYCLING SYSTEMS



Shaping the face of organic waste

Lakeshore becomes the first privately-held company in the nation to utilize a digester for collected food scraps and landscape waste >> PAGES 6-7

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LAKESHORE Recycling Systems



A message from Managing Partner Rich Golf Lakeshore paves the way for new diversion technologies

There are countless features about Lakeshore Recycling Systems that set us apart from our competitors. Whether the defining difference is our sustainability message in vowing to never own a landfill or our dedication to exceptional customer service in all areas of customer experience, Lakeshore is always working to improve itself as the industry leader. This is how Lakeshore cements its standing as Chicagoland's premier hauler in the waste and recycling industry. Lakeshore doesn't want to just exceed expectations— we aim to define industry standards.

Over the past year, Lakeshore has expanded its focus in one area in particular: technological innovations. This arena has seen direct changes across all segments of our business, from eco-friendly trucks, to new and innovative services, to the Company's internal operations.

Fleet development

Our trucks are at the heart of what we do. In order to provide the best service to our customers and community, Lakeshore has worked diligently to make our growing fleet more sustainable. We have worked relentlessly to better our service for our customers and grow our fleet, which now retains over 275 vehicles of various styles and uses. Within those trucks, we have incorporated numerous ways to improve.

In a two-year span, our Operations Department has automated our growing truck fleet to better equip them into being cohesive for efficient maintenance and productivity. In addition to this development, we have enabled tablet usage in the majority of Lakeshore's vehicles to best maintain quick communication between our drivers and dispatch teams, match timely updates on routes and take photographs if a customer were to call with questions regarding their most recent services.

Service innovations

This past year, Lakeshore has implemented new service options throughout our community. First, we implemented cuttingedge RFID technology used for residents in the Cities of Highland Park, Highwood and Wheaton. In addition to RFID, we began the first curbside food scrap/yard waste service for Highwood this May. Highwood is one of the first cities in Illinois to have a program of this caliber. Furthermore, we have grown our service offerings and expanded to now include portable restrooms (Illinois' second largest), street sweeping, mulch processing and storage on-site.

In creating new opportunities for service advancement, Lakeshore is leading the way in organic waste collection. This spring, Lakeshore built a digester system at our California Avenue facility to take in food scraps and landscape waste when it opens in summer 2017. Our digester will enable Lakeshore to take in 15 tons of organic waste a day and within seven days be left with three tons of nutrient-rich fertilizer. You can learn more about this process on pages 6-7 of this newsletter. This organic digester system is not only cutting-edge for Chicagoland, but it sets the national stage for the future of organic waste diversion.

Looking to the future

Lakeshore is fully invested in continuing our internal and external growth within the greater Chicago community and expanding our services and dedication to new innovations. We look forward to progressing site advancements that maintain our leadership as the premier waste hauler in the Midwest. Here's to another sustainable year as 2017 moves forward!

Rich

Innovative sustainability solutions at the heart of Lakeshore's mission



Clean wood becomes ground and recolored mulch in Lakeshore's cyclical diversion process.

We have repeatedly stated the phrase "zero waste" over the years, either when describing our business model, our company values or the promise made to our growing customer base. But what do these words mean? It's far more than piggy-backing on a trend as the concept of "going green" has become all the rage. Zero waste has been a part of our core LRS values since our inception and is a part of the foundation that sets us apart in this competitive marketplace.

Multi-faceted cycle

The goal of zero waste is achieved when paired with new innovations to continually drive it forward. For example, Lakeshore creates and sells mulch at certain Lakeshore facilities where customers empty their waste and recycling. From there, clean wood (wood that has not been recolored or treated) is separated from other commodities to eventually become mulch. When enough clean wood has been accumulated, this wood is ground down and recolored using environmentally safe colorants. This process allows customers to repurpose this new product for a second life within landscaping and empowers the customer with a sense of pride in knowing they are helping improve the environment.

Innovation + sustainability

To make our sustainability efforts come to fruition, Lakeshore continues to reinvent operations with advanced technology. Remaining stagnant is not an option, as seen with our newest digester system (further discussed on pages 6-7).

It was not enough for Lakeshore to successfully begin Illinois' first curbside compost collection program; Lakeshore took this effort one step further with the creation of a digester system. The digester will allow us to take in food and landscape waste and convert it into rich fertilizer for better diversion.

Zero landfill

Lakeshore's heritage stems from its constant commitment to the environment. Unlike most of our competitors, who feed waste and operate landfills, our bottom line is driven by how much we can divert away from the landfill. Though not everything used daily is recyclable, it is Lakeshore's mission and responsibility to continue to promote and actively implement recycling best practices and contribute to a more eco-friendly business model with innovative waste solutions.

In short, Green is Good!

Lakeshore Mission Statement

Lakeshore Recycling Systems is the **industry leader** in providing **innovative** and **environmentally responsible** waste and recycling solutions.

Our team delivers **exceptional service** and **value** through a relentless commitment to **customer satisfaction** and the preservation of our environment.





Blackboard Chalk

Blackboard chalk is becoming more popular, whether you have kids that use it for art or a trendy way to label items in your kitchen. But what do you do when you use the chalk to the end and can no longer comfortably hold it? Don't throw it away!

Blackboard chalk fragments are great to rub on metals to give them a new shine. Additionally, you can store these chalk pieces with your child's costume jewelry collection to keep the jewelry from tarnishing!



Lakeshore's Spotlight on Achievement Award Recipient Jorge Lara



Lakeshore's newest Spotlight recipient, Jorge Lara stands with Mark Sredin to accept his award.

To continue moving forward in our sustainability efforts, we know that every role offers immense value to Lakeshore. As we expand in our service area, facilities, employees and more, we recognize our Operators in the yard are key contributors to the environmental mission and values we uphold. We are proud of the hard-working and valuable team we have built over the years and recognize one Operator has always gone above expectations to put the best interests of the company first.

Lakeshore is extremely pleased to recognize Jorge Lara as this quarter's Spotlight on Achievement Award recipient.

Jorge is an Operator at Lakeshore's Exchange Material Recovery Facility. Having worked alongside Facility Manager Mark Sredin for over 10 years, we have seen Jorge put dedication and care into everything he does, which includes properly loading the trailers, accurately weighing the trucks and ensuring that all operations and safety protocol runs smoothly in the yard. Jorge started as a Laborer and then advanced to an Operator position based on his reliability and above and beyond performance. "Jorge is a valuable asset to our company and his performance continues to improve year after year," said Facility Manager Mark Sredin. "Just recently, Jorge was asked to fill in at our Northbrook Material Recovery Facility and now the Northbrook team doesn't want him to leave!"

Jorge is one of the most versatile employees at Lakeshore. With experience as a Laborer and an Operator, Jorge can do any job asked of him. Often, he is proactive when it comes to his work and automatically takes on additional responsibility without being asked to.

"Jorge can fill any role and operate any vehicle in the yard which makes him not only someone management can rely on, but someone all employees, regardless of role, can look up to," said Sredin.

Jorge's style of leadership is structured and simple. He is a quiet man who works hard and always gets the task done. When needed, Jorge volunteers to work extra hours and cover holidays. His admirable self-starter attitude coupled with his perfect attendance continuously helps motivate other Lakeshore employees to succeed.

Proving sustainability with recycling



Now more than ever, sustainability is a buzz word companies use to fuel their marketing. New businesses are making their mark largely with an ecological mission to leave a less impactful footprint on this world. Words such as sustainability, eco-friendly, green, recyclable, compostable and many others are incredibly popular in today's vocabulary, but do we really know why?

How can we be sustainable?

For starters, we can address how much waste Americans alone send to landfills. Americans represent 5% of the world's population but generate 30% of the world's garbage. In other words, Americans throw away enough waste each day to fill 63,000 garbage trucks. To put that into greater perspective, if each garbage truck was lined up, it would stretch halfway to the moon in just one year.

Properly recycling materials goes hand-inhand with being sustainable. With less than 2% of the total US waste stream actually recycled, we have a huge opportunity to recycle more and limit the amount of generated waste. Most recyclable materials are made into new items, many of which are restocked in stores in as little as 60 days.

Recycle over landfill

Each commodity has a different lifespan, but all are better served out of the landfill. Aluminum is one material that proves this point. Aluminum cans may take 200 to 500 years to fully decompose in a landfill. Conversely, if properly recycled, it can be back on store shelves in as little as 60 days. Aluminum has no limit on the amount of times it can be recycled. Glass can also be recycled over and over again, yet it could take 5,000 years to decompose in a landfill!

A common recyclable material such as plastic should also avoid landfills. When thrown away, plastic takes up to 1,000 years to decompose. Even better, recycling this material takes 88% less energy than making it from raw materials. Plastic is one of the most frequently-found commodities polluting the world's waterways and oceans. Cardboard and paper are two other materials that should be at the focus of recycling efforts. Similar to other recyclables, these materials take less energy to produce when properly recycled. Paper takes 60% less energy and cardboard takes 24% less energy. Not only do these materials conserve energy, but they also save oil, water and trees, to name a few.

The Lakeshore difference

Our focus to protect the environment goes beyond words. We are constantly looking for ways to recycle more and reduce waste, a core reason why we do not own a landfill and never will. Our single-stream recycling capabilities make it easy for anyone to recycle as one can co-mingle allowable items into one container. In addition, our cutting-edge recycling center enables us to process more than 110,000 tons of high-grade residential and commercial single-stream recyclables with the capability of sorting, separating and allocating over 20 tons of waste per hour.

This equipment, coupled with Lakeshore's steadfast best practices promoting and investing in recycling innovation, unquestionably makes sustainability not just a buzz word, but a way of life and core company value.

Candle Stubs

We like to think a home isn't complete without a few candles. They don't last forever, though! When your candle is almost at its end, save the stub to use as a wine bottle cork.

Soften the candle stub so it fits the neck of the bottle. And when you are finished with the bottle, save it for your next art project. Decorated wine bottles make wonderful gifts!



FINAL PRODUCT output

361

INTERNAL DIGESTER

The organic material is transported into the digester. In this process, the organic material spends the most time and becomes the next-level product. To begin the process using the **internal digester**, the organic material is transported into the top of the digester using the elevator, where a computer then records the weight input. When the proper weight input has been reached, the system will temporarily stop loading so the digester can begin the digesting process. The system computer maintains moisture, weight, temperature and oxygen flow in the digester.

This function is necessary for beneficial bacteria to act within the container and break these items down into organic fertilizer. Because this process uses oxygen rather than depriving it, there is no odor and no methane gas created throughout this step.

DISCHARGE Chute

Any plastic or foreign material removed in the prior step exits the system through the discharge chute. These items are then sorted at Lakeshore's nearby single-stream recycling facility to maximize the diversion process.

Lakeshore's California facility will be one of the first privately-held facilities in the US to utilize this cutting-edge technology. Not only does the digester provide a much-needed answer for organic waste diversion, it eliminates many negative impacts found in traditional organic waste collection. The digester system creates a nutrient-rich fertilizer in a processing time of seven days and can accept almost any type of organic material available. This is the perfect solution for many of Lakeshore's customers, whether restaurants, high-rises or homeowners. By utilizing this digester, there is a continuous output of nearly 90% of items and it can continue accepting materials 24/7 with minimal labor to monitor the machine. When the end product is processed, it is a 70% reduction of weight and volume from its original state.

By using this innovative system, dangerous methane gas will not be created, as typically found when organic waste is dumped into landfills. Also, less land is used in housing this technology in contrast to creating compost piles. Finally, there is zero water pollution and zero odor created when waste is converted into a fertilizer through the digester. All output is free of dangerous microbes and the high heat used in the digester destroys harmful bacteria that may be included in the waste.

DISCOVER THE DIGESTER

CRUSHER

The second step of the process, the **crusher**, further reduces the size of the organic waste and separates out any plastic or unusable material that may be present in the waste. This step utilizes advanced computer technology to measure the moisture content within this mixture. It will also add a thickener (such as sawdust) if needed from the storage tub.

I N P U T H O P P E R

To start the organic waste disposal process and create a nutrient-rich fertilizer, food scraps and other organic material enter the **input hopper**. This initial stage in the process takes

these materials and pulps it down into more m a n a g e a b l e sizes to make the process go smoother.

WATER POLLUTION

METHANE GAS

ODOR

WHAT GOES THROUGH THE DIGESTER? • Municipal Solid Waste (Plastic is

- Municipal Solid Waste (Plastic is separated in the process)
- Municipal Sewage Solids
- Manure
- Agricultural Crops and Food Waste
- Industrial Waste
- Logging and Wood-Manufacturing Residues
- Miscellaneous Organic Waste

BEGIN THE DIGESTER TOUR HERE



Food Scraps

If you find yourself frequently making home-cooked meals, you may notice that you are also creating food waste with scraps. Food scraps, however, can be made into a fresh veggie broth. Simply keep a freezer bag in your freezer and every time you have vegetable scraps or vegetables that are about to go bad such as onions, garlic, carrots, herbs, etc., add these pieces to your bag in the freezer.

When you've reached about five cups of veggies, throw the frozen scraps in a pot with nine cups of boiling water and a fresh bay leaf and let that simmer for about an hour. Not only will you be giving your scraps a second life, but you will also be saving money since you won't need to buy store-shelved broth!



Stand-out employee highlight: Sorting Line Leader Adrian Perez



In March 2016, Lakeshore expanded its sustainable initiatives with the addition of the Northbrook Material Recovery Facility (MRF).

After purchasing this facility, we completed an extensive overhaul of the internal infrastructure and restructured operations to make it one of Lakeshore's top C&D recycling MRFs. The addition of our Northbrook MRF advanced Lakeshore's growth by adding a strategic asset and location to the northern Chicago suburbs. With six transfer facilities in the area handling mostly landfill material, Lakeshore utilizes the location to recycle and divert over 80% of C&D debris.

Not only did Lakeshore grow the Northbrook MRF to be a cutting-edge recycling facility, we successfully transitioned all employees from previous ownership into the Lakeshore family. In the past year since this change, it has been a welcome transition within the Lakeshore family to encourage this talented team to continue enhancing our sustainability focus and efforts.

Adrian Perez is one of those employees and a key asset to helping facility operations function smoothly. Since day one, Adrian showed unquestionable signs of leadership. Shortly after the facility purchase, his leadership skills determined his promotion from Line Sorter to Sorting Line Leader.

As Sorting Line Leader, Adrian works closely with his team to ensure safe operations and take care that the material on the line is diverted appropriately.

He is one of the two Sorting Line Leaders at Northbrook MRF and plays an integral role in heading the line. Additionally, Adrian facilitates communication between his team and the Facility Supervisor, as well as helps with finding areas for facility improvement.

"Adrian is the type of guy who is committed to getting the job done right. The other facility employees see that and respect him," said Facility Supervisor Edgar Vazquez. "He comes to work with a great attitude and a smile on his face."

While Adrian is focused on safety in the workplace, his willingness to improve the way Lakeshore operates makes him a truly valuable employee.

"Northbrook MRF has increased production since purchasing this facility last year. Adrian's leadership has helped us be more efficient, which in turn helps us divert more C&D waste than any other privatelyheld hauler in Illinois," said Facility Manager Joe Zepeda.

Congratulations to Lakeshore team members celebrating anniversaries January–March 2017

16 YEARS

Armando Jaramillo Daniel Peterson

15 YEARS

Joseph Kohler Robert Stark

14 YEARS

Krzystof Bafia Arquimedes Chavez Javier Ochoa Robert Wyse

13 YEARS Oscar Siguencia

12 YEARS

Jacobo Barrientos Mark Sredin

11 YEARS

Abundio Garcia Ruben Jaime Francisco Maldonado Kenneth Schumacher Aurelio Viveros

9 YEARS

Arnulfo Bailon Darwin Molina Jose Sanchez Craig Sherman Ralph Thomas Cleavon Warren

8 YEARS

Timothy Bouma Juan Callejas Juan Favela Adelaido Galvan Jorge Lara Rene Medina, Jr. Jesus Roman

7 YEARS

Hugh Conner Juan Espinoza Brandon Garcia Nick Grigutis James Peterson Raul Toledo Casimiro Verdin Charlie Zimmerman

6 YEARS

Dorota Bielnicka Adam Fidermak

6 YEARS (CONTINUED)

David Orrico Jose Sanchez Paul Steurer Cesar Villanueva

5 YEARS

Jerry Arreola Thomas Canzoneri Rafael Jaca Larry Milby Joel Nieves Antonio Ochoa Ausencio Reves

4 YEARS

Jennifer Boza Miguel Cruz Jamie Queroz, Jr. Nir Torres Randy Vantholen Richard Young

3 YEARS

Scott Jansen Francisco Magana Patrick Rodkey Robert Siegers

2 YEARS

Adam Jager Edward Lassiter, Sr. Rogelio Nuñez Librado Mota Jamil Salman

1 YEAR

Christina Adams Isai Alvarado Gilberto Avila David Biggs Pablo Bravo Sebastian Brito Victoria Bromberger Joey Brown Jose Camacho Juan Cantu **Carlos Cervantes** Jaime Crespo Ciriaco Crispin Brannon Dalev Flor Escalera Gerardo Estrada **Giovanni Flores** Jose Flores Anthony Focht Samuel Fonseca Piotr Fudala

1 YEAR (CONTINUED) Victor Galvez

Antonio Garcia Juan Garcia Oscar Garcia Salvador Garcia Kemothy Gibson Juan Gódina Rogelio Godina Agustin Gomez Javier Gomez Jaciel Guandulain Juan Henriquez Jose Hernandez Lamonte Hopson Terrell Jones Eric Kent Lac Kieu Thomas Larson Justino Leal Miguel Lopez Roberto Lopez Rebeca Luevano Donato Martinez Daniel May Horacio Mendez Jorge Mireles Miguel Molina Juan Morales Manuel Moreno Martin Nateras Emmanuel Nuñez Marie Paff Jennifer Palicka Jose Partida Gonzalo Pedraza Adrian Perez Freddie Perez Alexander Petrou Chelsea Ramage Dariusz Rembowski Javier Rodriguez Antonio Sanchez Jesus Sanchez Samuel Sangabriel Robert Skala Jesus Solano Marc Stamper Robert Sylvester Bernard Szczepkowicz Dylan Thompson Edgar Vazquez Juan Vazquez Susie Velazquez Carlos Vievra Tony Villanueva Raul Zayas

Dryer Lint

Even when laundry day comes around, there is still an opportunity to protect the earth! You may find this hard to believe, but the lint buildup in your automatic dryer can actually be upcycled. Instead of throwing that lint into the garbage, save it until you've filled up a large bag.

Then, bring out your crafty side and use it as stuffing to make a oneof-a-kind stuffed animal or pillow. This method will create a gift that is friendly to both, the environment and your wallet and that the children in your life will truly enjoy!





Popsicle Sticks

During spring and summer, it's likely you stockpile popsicles and ice cream for a cold treat. And surprisingly enough, those popsicle sticks don't need to go straight to the garbage container.

After you enjoy your snack, rinse the wooden sticks clean and reuse them as markers for rows of garden seeds and plants. Use a permanent marker to label each stick with the appropriate plant or seed name and never doubt where your herbs are planted again!



Celebrating our LRS Earth Day Hero



To celebrate Lakeshore's month-long Earth Day celebration, we posted daily environmental facts on our social media channels, shared fun and interactive recycling quizzes and participated in educational Earth Day events. Most importantly, we encouraged the community to start a conversation about the environment by sending us photos showing how they have made an environmental impact. These photos were then reviewed before an LRS Earth Day Hero was selected shortly after Earth Day.

We received many great submissions, which included creative ideas that prove anyone can make an environmental difference within their community. One particular entry stood out from the rest; we crowned Liz from Winnetka our LRS Earth Day Hero. Liz went above and beyond, sending us five different community-impacting waste reducing initiatives where she was involved.

First, Liz teamed up with local Go Green groups, boy scouts, hockey families, the Winnetka and Wilmette Park Districts and Adams Plastics to recycle hockey rink liners. At the end of the season, the large group came together to gather, roll, cut and load the liners into the truck. In addition, Liz and her family installed two underground storage tanks in their yard. The storage tanks keep water out of their home, yard and street and can be released manually after a heavy rain. This initiative reduces the amount of storm water that goes in the drains. Liz is also part of a group that introduced a "three-bin" collection system for community meetings and events; one container for composting, one for recycling and one for garbage. Additionally, her group made signs to help educate people on how the containers are used. Liz went above and beyond environmental excellence by working with her Village business districts to install more recycling containers, along with creating useful recycling guides. In addition to these efforts, Liz filled her car with collected plastic bags and recycled them at her local grocery store.

Liz's recycling initiatives are a true catalyst in helping make our community a more environmentally friendly place. Environmental contributions such as these do not go unnoticed and we are thankful to have people like Liz in our community who do what they can to make a lasting difference.

Honorable mention

Our LRS Earth Day Hero runner-up prize goes to an environmentally dedicated young man, Grant. At 11, Grant founded his own garbage company, OLLO Garbage Industries, to raise recycling awareness in his neighborhood. Grant is building a customer base and helping his community through excellent waste and recycling services. We look forward to Grant's future endeavors!

Congratulations to our winners and a great job to all those who participated in LRS' 2017 Earth Day Hero search!

Waste word: upcycle



Upcycling is a great way to bring out your creative side and find ways to give a second life to what would otherwise be discarded and sent to a landfill. The act of upcycling not only reduces our footprint through the reuse of materials, it can also save money and inspire creativity. As the leading waste and recycling hauler, we know that waste will always be generated.

Our environmental mission is not just about collecting waste, but spreading awareness and leading by example to reduce the amount of waste. By promoting the upcycling of waste materials, we are helping protect the environment and limiting the quantity of waste sent to landfills.

Upcycled materials can turn into many different types of beautiful pieces of art, from garden materials, to organizers, to home decorations, to anything you can imagine. Need some inspiration before getting started? View the sidebars within this issue for fun upcycling ideas!

Teapot

For all of our tea drinkers, there is no need to ever throw away your old teapots. If your teapot ends up with a crack and won't hold water anymore, we have a solution!

Use your teapot as a flower canister. This will not only avoid sending what was once a really functional teapot to the landfill, but also bring a beautiful and original piece of garden art to your home!



Safety corner: heat stress protection

During these coming months, be prepared for weather to heat up for longer periods of time. With this in mind, there are dangers to working outside in high heat. Whether it's a Lakeshore employee working in the field or a homeowner gardening outside, we ask everyone to be careful in the heat, pay attention to heat exhaustion symptoms and stay protected.

Some common symptoms of heat exhaustion include headaches, dizziness, weakness thirst, nausea, irritability and confusion. While these are triggers for heat exhaustion, the safest bet is to be mindful of how you feel the longer you are outside.

To protect yourself from heat exhaustion, make sure to drink plenty of fluids (drinking water every 15 minutes is recommended). In addition, avoid liquids such as caffeine and alcohol to stay hydrated longer. Most importantly, don't overdo it!



Lakeshore employees are encouraged to take frequent breaks from the heat as much as needed until they have adjusted to the change in climate and we encourage our readers to do the same!



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Going green in more ways than one

THIRD ANNUAL CHICAGO ST. PATRICK'S DAY PARADE

This past March, Lakeshore employees, friends and family marched downtown alongside our decorated blue truck for a third year in a row. The Chicago St. Patrick's Day Parade is a popular Chicago tradition and brings together thousands of viewers, residents and visitors to witness the parade's route along Columbus Drive. Even if this year's cooler weather kept people from taking part in person, the parade had a huge draw since it was televised live on ABC!



Lakeshore was proud to once again sponsor this important Chicago tradition and bring awareness of our brand's message and sustainability efforts to the community. Joined by over 30 dedicated men and women, our team was able to walk the route and be a part of this historic Chicago event once again. We handed out Lakeshore-branded items to the crowd while showing exactly what it means to be a part of the Chicagoland community.

WE ENCOURAGE YOUR COMMENTS AND FEEDBACK!

Send your comments or suggestions to **REgenerate@LRSrecycles.com**. Or if you would like a digital copy of this newsletter, please email us and we will send it your way. **THANK YOU!**

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