



SRG Update January 2016

Visit our newly revamped website
www.SustainableResourcesGroup.com

**Proving sustainability can be profitable:
A case study in total plant recycling**

Food and beverage manufacturers often have multiple plants for various operations, each with unique waste management challenges. Many times Sustainable Resources Group begins a relationship with a valued client by helping solve a problem at one facility and then grows the relationship by helping solve waste problems at the client's other locations. Such is the story of how SRG has continued helping this national prepared foods manufacturer overcome its waste challenges for more than a decade.



In 2000, while assisting this client with waste challenges at one location, the client asked SRG to investigate a problem managing sludge at another manufacturing facility in another state. At that plant, liquid waste from the prepared foods manufacturing process is piped to an onsite pre-treatment facility for dewatering. The remaining solids were then being transported to a landfill where an average of four out of six daily truckloads were being rejected for high free liquid content. The rejected containers were being returned to the client's pre-treatment

facility to repeat the dewatering process. The cost of trucks returning to the plant and the cost of repeating the dewatering process were substantial.

SRG worked with the client to identify the root cause of the problem: high levels of grease in the sludge making the dewatering particularly difficult. SRG gained approval and permits from the state's environmental control department and conducted a study on various land applications for the sludge. During the month-long study, SRG tested various rates of sludge application (gallons per acre) on hay fields and various ratios of sludge with other material such as poultry litter. Although there was potential for beneficial use in land application, the overall cost and inefficiency of the process eliminated this as a viable solution for handling of the client's sludge.

After investigating the ecological value, efficiency, and potential costs or savings of several other beneficial uses for sludge, including composting, animal feed and soil conditioning, a solution for composting the sludge was chosen. Eight months later, SRG implemented a process for collecting sludge at the plant and transporting it to a nearby composting facility. A decade later, SRG continues transporting approximately 30 tons of dewatered waste a day via dump trailers from the plant to the compost processor.

The client eliminated their sludge problem and reduced their annual waste management costs by nearly \$100k. They moved closer to being 100% landfill-free and having their waste repurposed for beneficial use.

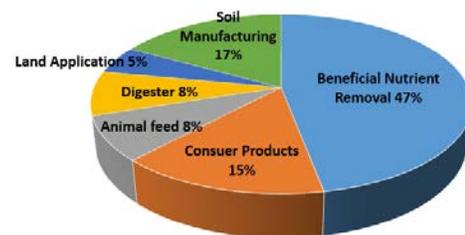
[Read about the other ways Sustainable Resources Group helped this client implement total plant recycling.](#)

Now that's a lotta...

As of end of 2014, Sustainable Resources Group has helped companies like yours repurpose 134,000,000 pounds of solid waste. That's nearly equivalent to the weight of 289 Statues of Liberty. We've also repurposed 35,400,000 gallons of liquid waste. That's enough to fill nearly 54 Olympic-size swimming pools.

Through a wide variety of applications, we're able to redirect your waste into beneficial-uses:

- Beneficial Nutrient Removal - A process that results in solid waste used across agricultural and consumer applications
- Soil manufacturing - Leveraging waste as components for potting soil and top soil
- Consumer products - Incorporating waste as raw materials for products like fireplace logs
- Animal feed - Supplementing animal feed with food waste



- Digesters - On-site anaerobic waste processors at farms
- Land application - Assimilating waste into agricultural fertilizer that is all natural

Visit our [website](#) to learn more about how waste solutions can benefit the planet and your bottom line.

The Sustainable Resources Group family grew in June

Nathan Pacanowski joined our project management team after acquiring a degree in business management from Penn State University. A lifelong Pennsylvania resident, Nate and his family have deep roots in the state and its agriculture. Nate said, "I've always been around agriculture; my father managed the farm we lived on for a while." Nate's interest in sustainability began on the farm and grew at Penn State, where professors and peers discussed it in business classes. His role at SRG enables him to combine his background in farming with his interest in business. "I enjoy problem solving," Nate said. He looks forward to "finding the waste material [from food manufacturing] that most people would find the greatest use for that also generates profit, or at least reduce the cost for the food company."



Nate believes that his experience at Penn State taught him creative problem solving and enhanced his people skills. His internship with Firestone extended his education in marketing and sales and helped him hone his customer service skills. He also picked up some hands-on mechanic skills he hopes to put good use with SRG.

Nate enjoys outdoor activities year-round and wanted a job that "wouldn't be the same thing every day." He also wanted a role "where I'd get an equal balance between learning business and sustainability and where I could get in the field and solve problems hands-on." He's found that at SRG where he helps maintain the fleet to ensure on-time services to our clients. Nate also assists with residuals sampling and managing the waste handling logistics for several SRG clients.

Looking forward, Nate said, "companies will continue finding how important it is for them to work with farmers and agriculture in general to get rid of their waste from food processing." He believes "there are definitely ways out there for these big companies to send their waste to farmers rather than sending it the landfill." When asked how Nate will contribute, he said, "I think down the road I can have an important role interacting with business people and discovering ways we can work together to help them solve their waste challenges." We think so too! We welcome Nate to the SRG team and the growing force of people delivering innovative and profitable sustainability solutions.

Professional Recyclers of Pennsylvania



Sustainable Resources Group participates in several industry associations that help further the cause of sustainability in many areas, including recycling.

The Professional Recyclers of PA offers many benefits including opportunities throughout the year for members to come together and exchange information and ideas on how industry throughout Pennsylvania can lower its carbon footprint without lowering its profitability.

We will be taking advantage of one such opportunity by attending PROP's annual conference in Harrisburg in 2016. We'd love to meet you there and talk about how SRG can help you solve your waste with beneficial use recycling options.

[Read more about this event today and signup to attend.](#)

MAKING SUSTAINABILITY A PROFITABLE REALITY



Reduce waste



Reduce costs



Increase Profit



Be sustainable

Sustainable Resources Group, Inc. helps companies find solutions to deal with organic and inorganic waste at their facilities that are both beneficial to the environment and beneficial to our client's finances,

We partner with others seeking innovative waste solutions and help implement new beneficial waste management processes for our customers to take advantage of new waste management channels.

Let us help you find and implement initiatives to achieve your green goals, such as becoming 100% landfill free.

**Call us today at
610.840.9200**



Wishing you a peaceful and green 2016!