

"Celebrating 25 Years in the Recycling Industry"

**2015 Winter Edition** 

## RFT Celebrates its' 25th!

RFT celebrates its' **25th Silver Anniversary!** It is with great pride that we celebrate 25 years in the recycling and environmental sustainability industry. To highlight this great milestone we look forward focusing on the sustainable growth of the organization with the continued commitment, support and expertise of our Board, membership, sponsors and extended network. In honor of this momentous occasion we invite you to join in the celebration of events and helping us to shape the next 25 years of RFT!

# Yard and Bulky Wastes Collection – Alternatives for Local Solid Waste Agencies - By Marc J. Rogoff, Ph. D., SCS Engineers

Organics recovery is being considered by many local solid waste agencies to help improve their waste diversion rates. Unfortunately, yard and bulky wastes have traditionally been considered the bane of most solid waste collection managers. Collection of these materials poses great difficulties in the scheduling of manpower and collection equipment. However, there are many good management strategies to help minimize costs, improve customer service, and improve the quality of organic materials for composting opportunities. *Continued on page 5...* 

"The Winter Summit gave me the opportunity to create new relationships and learn about the future of our industry at the same time. It was a great investment for me professionally and personally..."

- Dave Afonso, Rehrig Pacific Company



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## Yard and Bulky Wastes Collection – Alternatives for Local Solid Waste Agencies

By Marc J. Rogoff, Ph.D., SCS Engineers

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Currently, many agencies still provide unlimited collection of yard wastes and brush as part of their levels of service. This makes collection of these waste streams very labor intensive, costly, and makes scheduling of these services extremely difficult to predict.

## Case Study

Last year, SCS was engaged by a Georgia client to evaluate long term opportunities to enhance customer services, expand recycling, and develop a long-term business plan. In essence, city fathers were looking for ways to get a handle on their long term costs. The agency already offers automated collection of municipal solid waste for residential customers, some curbside recycling and operates drop off centers for additional recyclables. All residents receive weekly collection of solid waste using side-loader trucks and rolling carts on a set schedule, and white goods from the curb or alley bimonthly, unlimited collection of yard trimmings, and unlimited bimonthly collection of brown goods (bulky waste)

Completing the yard and brush wastes collection requires a significant amount of time and expense because of the unlimited volumes of materials placed curbside (Figure 1). The lack of predictability of these volumes also makes it difficult to complete entire neighborhoods within a reasonable schedule, as well as increasing overall collection costs for the City.

Further, the use of grapple equipment oftentimes results in damage such as ruts and holes near the roadway. As such, the

City's Division managers expressed an interest in looking at collection alternatives for yard waste and tree trimmings. The workhorse of the current City collection system are knuckleboom grapple trucks tipped with clamshell buckets, with each including a dump body or trailer.

## **Benchmarking Survey**

SCS conducted background Internet research on how yard waste and tree trimmings were currently being collected by municipalities and counties throughout the State of Georgia. This effort was then followed up by a series of telephone interviews of key public works and sanitation superintendents/managers of these jurisdictions. Briefly, the survey suggests the following major conclusions:



Figure 1 - Excessive amounts of yard and brush placed curbside.

- While most agencies continue to collect yard waste most place a limit on the volume of yard waste placed by their customers curbside.
- Most agencies place restrictions requiring that yard waste either be placed in a set number of metal or plastic containers (95 or 32-gallon) or a set number of biodegradable paper sacks. Many communities compost their yard waste materials so many restrict the use of plastic bag containers to minimize contamination.
- Further, agencies appear to place limits on the location of these containers or bags (i.e., near or on top of fire hydrants, cable or utility boxes, mailboxes, on or near storm drains, or any public utility receptacle).

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- Similarly, most Georgia solid waste agencies appear to have established limits on the size, diameter and overall volume set out (e.g., 4 feet in length, materials less than 6 inches in diameter, and overall 3 cubic yard volume).
- Lastly, the survey suggests that customers are usually afforded the opportunity for special pickups, usually for an additional fee, if set-outs exceed the agency's limits.

#### Don't Bag It Programs

One of the other things that many communities have done over the years is educating their customers to use mulching mowers to chop up grass clippings finely on their lawns and thus not have to rake or bag these materials for municipal collection. Extension agents across the country have developed intense education programs. We also helped analyze other alternative methods of collection such as seasonal vacuum collection of leaves, setting standards on the number of bags that could be collected for free, and containerized collection of yard waste. The aim here is to eliminate the outside of the barrel collection issue and also maximize the use of the city's fleet of automated collection vehicles. A secondary advantage would be the reduction in worker's compensation claims.

#### **Customer Convenience Centers**

Another yard waste collection alternative is the development of customer convenience centers which would allow the city's customers to self haul significant volumes of yard waste and brush to city operated facilities which were conveniently located throughout the city.

Figure 2 is a good example of a yard waste recycling facility that SCS is currently finishing up a final design.

The client in this case has sited a facility that is close in from the landfill and which will allow recycling of yard waste from residential and commercial customers. The site incorporates a scale-house to weigh incoming loads from customers with charges for commercial generators. The site also assumes operation of transported tub grinder when sufficient volumes are generated. The volumes are then transported to a regional co-composting facility located at the County's landfill.



Figure 2 - Example of a citizens drop off center .

## 311 Scheduling

Undoubtedly there will customers who will be unable to self haul

large volumes of yard waste to these facilities. To help develop cost efficient routing, many communities have used their 311 system or special Apps to enable their customers to schedule special pickups.

## Summary

The study showed that there are effective ways to reduce the cost of yard and brush wastes collection, while at the same time provide good customer service and improve opportunities for composting. Agencies can migrate from providing unlimited collection of these materials and improve their long-term financial situation and business planning.