



Cut Company Costs by Cutting Company Wastes

FACT SHEET

OVERVIEW

As landfills fill to capacity and waste costs rise, there is increased pressure on business and industry to reduce solid waste disposal. In the years to come, it will become more important than ever for business and industry to find innovative ways to decrease their solid waste. Fortunately, there is also an opportunity to enjoy cost savings. This fact sheet is intended to help business and industry determine ways to both decrease their disposed tons and disposal costs.

BENEFITS OF WASTE REDUCTION

There are many environmental benefits from waste reduction. Avoiding waste slows the depletion of natural resources, conserves valuable landfill space, and cuts down on the pollution associated with manufacturing. In addition, waste reduction offers businesses further advantages, including:

- **Economic Advantages.** Potential economic advantages of waste reduction include reduced waste disposal fees, savings in material and supply costs, revenues from marketing reusable materials, and savings from more efficient work practices.
- **Enhanced Corporate Image.** An enhanced corporate image as an environmentally conscious company might attract customers. Surveys show that more and more consumers consider a firm's environmental record when making purchasing decisions.
- **Improved Employee Morale.** Employees may appreciate company's efforts to reduce waste. This heightened morale could increase employee enthusiasm and productivity.
- **Compliance with Local or State Solid Waste Regulations.** Some states and localities in the United States require businesses to take steps to reduce or recycle their solid waste. Some communities also restrict the amount or types of waste accepted at solid waste management facilities. By implementing an aggressive waste reduction program, a business can help ensure compliance with these requirements.

REDUCE, REUSE, AND RECYCLE

Many businesses and industries have opportunities to reduce, reuse, or recycle their solid waste. To get started, companies should closely examine their waste stream. A key step is to walk through the processes occurring at a given facility and identify where and why wastes are generated. Do not be afraid to look into garbage cans or dumpsters. Once this is completed, the next step is to determine which materials or wastes can be reduced, reused or recycled. Some basic approaches include:

- **REDUCE** - Look for areas where packaging can be eliminated or reduced or where durable and reusable packaging might be employed. Using more durable equipment and supplies can also reduce disposal costs and waste. Review processes for potential to reduce trim waste and run-throughs. Improving production efficiency can go hand-in-hand with efforts to cut down on waste. Simple office reduction measures include reusing paper or printing and copying double sided.
- **REUSE** - Often waste products during one aspect of an operation can be used elsewhere or in another capacity (sometimes with sister facilities or other nearby industrial plants). Many

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transport packaging products can also readily be reused (such as pallets). Look at purchasing products in reusable totes.

- **RECYCLE** – Collection programs can be implemented to recover materials that are prominent in the waste stream. Recycling programs can result in reduced disposal costs and possibly provide revenues. A few commonly recycled materials from commercial and industrial sources include corrugated cardboard, pallets, aluminum cans, office paper, and product scrap. It is important to make sure existing recycling programs are being utilized. In some cases recycling programs are put in place but staff turnover or other issues result in the programs not being used effectively.

The N.C. Division of Pollution Prevention and Environmental Assistance (DPPEA) and many local governments can provide assistance in identifying waste reduction options. Please call 919.715.6500 or 800.763.0136 for assistance or contact information for local governments. In western North Carolina, the Waste Reduction Partners program offers free waste assessments and assistance in implementing reduction programs – call WRP at 828.232.5080.

FINDING RECYCLING MARKETS

The key to recycling is finding a viable market. A good strategy for any business is to check the local yellow pages and the local community recycling office for information on recycling outlets and service vendors. The Division of Pollution Prevention and Environmental Assistance (DPPEA) has also compiled the Directory of Markets for Recycled Material web site – www.p2pays.org/DMRM/. The Directory includes lists of recyclers and materials that the recyclers accept for reprocessing and reuse. The web site is fully searchable and DPPEA continuously updates it. For more information about the Directory, or to request a hard copy, please contact DPPEA at 919.715.6500 or 800.763.0136.

REDUCING SOLID WASTE AND DISPOSAL COSTS

The costs savings from reducing waste are generated in several areas. A reduction in materials landfilled means a reduction in the tipping fees paid for disposal. If enough waste is reduced, a company may also be able to eliminate or resize containers or alter hauling schedules generating savings on both rental charges and “pull” charges. In addition, the sale of many recyclable materials can generate revenues that can help offset any costs associated with operating a recycling program. For some materials, markets may be willing to provide transportation, containers or equipment if the quantity and quality of the materials is good. Businesses should contact their hauler for more information on recycling – a company’s current hauler will be able to help with the recycling process. For additional information, businesses might also contact the local government recycling office in their area.

SAVING WASTE COSTS BY ADJUSTING HAULING SERVICES

Waste reduction programs can reduce a company’s solid waste costs by reducing the frequency of pickups, disposal facility charges, and the number or size of disposal containers needed. If a company decreases its solid waste, it should consider renegotiating its hauling contract. Generally, a business is charged specific fees for items such as monthly rental and for each haul (regardless of the fullness of the container). If the number of hauls per week could be decreased or fewer or smaller containers could be used, a company will generally save money. Savings will also come from decreased tipping fees. Even if a company is unable to reduce its solid waste, there still may be an opportunity to reduce its waste costs. It may be possible to reduce costs by choosing the appropriate sized or correct number of containers, or hauling only when containers are full.

In order to reduce solid waste disposal costs, there are three steps that should be followed: (1) analyze your disposal operations and costs; (2) identify areas for potential savings; (3) and revise or rebid if necessary.

To get an overview of the specific costs associated with the current service, review hauling records and/or talk to the current hauler. Analyzing waste hauling and disposal costs should help identify how the hauler determines the company’s charges. A breakdown of the associated hauling, disposal, and rental costs for each container will help in negotiating with a hauler when the amount of waste has been reduced.

To identify potential savings, monitor disposal containers when they are emptied. Are they being hauled when full? What materials are being disposed that could be recycled? If pickup costs are more expensive than container rental costs, consider asking the hauler to make fewer pickups, rather than decreasing the number of containers.

If changes are deemed necessary, decide whether to work with the current hauler to adjust the current situation or, if under contract, rebidding the contract when it expires. Consider specifying a review and renewal clause, which allow adjustments in the contract at specified intervals. If the decision is to rebid, the goal should be an agreement that leaves nothing to assumptions – and yet allows flexibility for changing conditions.

AVERAGE COSTS FOR SOLID WASTE SERVICES

The compilation of container costs in the table below will help determine what business should expect to pay for solid waste disposal. These averages are based on municipal solid waste; haul fees for disposal of special wastes may cost more than what is listed below. These numbers are “ballpark” estimates based on data from DPPEA waste assessments. Specific charges may vary by region, by hauling distances, by the level of competition between haulers, by local tipping fees, and by the negotiating powers of a company.

CONTAINER TYPE AND SIZE	RENTAL COST RANGE	AVERAGE RENTAL	HAUL COST RANGE	AVERAGE HAUL COST
40 Cubic Yard "Open Top"	\$50.00 - \$165.00	\$86.68	\$50.00 - \$119.00	\$75.93
40 Cubic Yard Compactor	\$212.50 - \$466.67	\$324.80	\$41.10 - \$119.00	\$78.50

Table 1: Forty Cubic Yard Roll-off Containers

CONTAINER TYPE AND SIZE	MONTHLY COST RANGE	AVERAGE MONTHLY COST
8 Cubic Yard Dumpster (1 pull per month)	\$79.00	\$79.00
8 Cubic Yard Dumpster* (1 pull per week)	\$70.20 - \$124.00	\$112.26
8 Cubic Yard Dumpster* (2 pulls per week)	\$217.64 - \$327.69	\$234.28
8 Cubic Yard Dumpster* (3 pulls per week)	\$341.18 - \$352.26	\$344.87

Table 2: Eight Cubic Yard Dumpsters

SCENARIOS OF COST SAVINGS FROM DECREASING SOLID WASTE DISPOSAL

The two scenarios below illustrate how to save money by reducing solid waste disposal. Keep in mind a few tips when figuring out cost savings for roll-off containers: (1) container rental is a monthly charge; (2) haul costs are charged for each haul; (3) and the tip fee is charged by the ton. When using 8 cubic yard (and smaller) dumpsters, the rental cost, haul fee, and tip fee are usually incorporated into one monthly fee.

Scenario 1: If a business is able to divert enough waste or adjust an existing schedule to decrease its hauling service from 3 hauls/week using an 8 cubic yard dumpster (\$344.87/month) to 2 hauls/week using an 8 cubic yard dumpster (\$234.28/month), it will save \$110.59/month or \$1,327.08 over the course of a year. This cost savings does not include added costs for recycling.

Scenario 2: If a business is able to divert enough waste to go from 2 hauls/week using a 40 cubic yard container (\$744.23/month, excluding tip fee) to 1 haul/week using a 40 cubic yard open container (\$415.46/ month, excluding tip fee), it will save \$328.77/month, or \$3,945.24 in a year. If bulky wastes are not collected in the 40 cubic yard container, the business may be able to save even more money, by switching to an 8 cubic yard dumpster hauled 5 times per week. Again, this cost savings does not include added costs for recycling.

TIPS ON GETTING THE BEST USAGE OUT OF YOUR CONTAINERS

- Do not think of solid waste disposal as simply a cost of doing business. Realize that it is possible to increase efficiency and find the least cost solution that prevents pollution, and reduces environmental impacts.
- If containers are not full when picked up, decrease the hauling schedule or switch to a smaller container.
- If using a 40 cubic yard open container hauled 1 time per week or less, investigate switching to an 8 cubic yard dumpster hauled 5 times or less per week. Reducing container size but increasing hauling frequency may save rental charges and allow hauling schedules to be fine-tuned for maximum savings.
- Consider purchasing compactor containers instead of renting. Rent alone on a 40 cubic yard compactor averages \$325.00/month or that is \$3900.00/year. With a life of 13 – 15 years, and a purchase cost of around \$15,000, your return on investment is less than 4 years. It should be noted, however, that compacting containers do require maintenance to ensure a long life.
- If hauling compacted rolloffs only twice a month, consider switching to an open container of the same size. Depending on compacting ratios and waste density, you may save money each month because of high rental costs for compactors. Switching to 8 cubic yard containers hauled several times per week may result in similar or greater savings.
- Using a compactor may only be necessary for large volumes of waste or for loads containing food waste. Compactors help keep food smells and pests at bay. However, if volume does not warrant a compactor, use a small container with frequent hauls instead. Remember, compactor rentals are very high.
- Have the waste hauler install a pressure gauge on all compactor containers so the fullness of the dumpster can be accurately gauged. Inability to maximize density will likely result in a loss of money compared to using other container options.
- Adequately train staff on how to use the compactors, so all waste gets crushed adequately.
- If using more than one hauler, consider using only one. A firm that uses one waste disposal company for all of its needs may be able to negotiate lower prices due to economies of scale and a hauler's need to please a 'larger' customer. Investigate using the existing hauler for recycling as well, which may save on some costs.

CONCLUSION

Companies that strive to reduce their solid waste disposal often enjoy cost savings. For more information on waste reduction, please contact DPPEA at 919.715.6500 or 800.763.0136 or visit the DPPEA web site at www.p2pays.org. For additional DPPEA services aimed at business and industry, visit DPPEA's Business and Industry Assistance web site at www.p2pays.org/main/industry.htm.



The North Carolina Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and education on methods to eliminate, reduce, or recycle wastes before they become pollutants or require disposal. Telephone DPPEA at 919.715.6500 or 800.763.0136 for assistance with issues in this Fact Sheet or any of your waste reduction concerns.

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