

## Company Performance

Before recycling, the company had 84 cubic yards of garbage picked up every week. They began reducing by arranging for their candy waste to be picked up for animal feed, and recycling scrap metal, beverage containers, cardboard, paper, and batteries. With StopWa\$te's help, the candy manufacturer found a way to recycle its plastics, and improved the efficiency of its cardboard recycling operations. These programs, which were implemented over a one-year period, allowed the company to reduce its garbage to 1.75 cubic yards per week, a reduction of 98%.



***“My advice to other businesses who want to implement waste reduction programs is, please, go ahead and do it. Not only do they help preserve our environment for future generations, they cut costs and generate revenue for your business.”***

— Joaquin Almaguer,  
Production Manager,  
American Licorice, Company.



## A Waste Reduction Case Study

**A**merican Licorice Company drastically reduced the garbage it produces, saving them \$48,000 dollars a year in avoided disposal costs and revenue earned from selling recyclables. In the food manufacturing industry, cutting your waste in half is a job well done. American Licorice eliminated 98%, making this company's performance exceptional. Future plans involve waste prevention changes, which alter the practices that create waste in the first place.



## Company Vision

New management policy initiatives are at the heart of American Licorice's environmental performance improvement. Top-management integrated elements of World Class Manufacturing into the company's organizational strategy. World Class Manufacturing is a business philosophy that emphasizes how organizational innovations and techniques, such as eliminating non-value-added activities, can significantly improve business performance. Elements adopted by American Licorice include setting manufacturing goals of zero waste, 100% efficiency, continuous improvements, and zero accidents. They also adopted an environmental policy statement that commits them to “environmentally responsible” business practices.

## PROFILE

American Licorice Company's Union City facility manufactures licorice products, including the *RedVines* brand (a twisted licorice strip popular at movie theaters) and distributes them throughout the western United States. The 240,000 square foot facility employs 370 people on two 8-hour shifts. Corporate headquarters are in Bend, Oregon.



***The Bottom Line: Annual Savings from Environmental Programs: \$48,000***

# “Reducing waste is a win-win situation.”

— Joaquin Almaguer, Production Manager, American Licorice, Co.

## The StopWa\$te Partnership

This case study is part of a series that highlights the accomplishments of organizations participating in the StopWa\$te Partnership. The Partnership is a free, technical assistance service dedicated to improving the environmental performance and reducing the operating costs of Alameda County businesses and public agencies. StopWa\$te is sponsored and operated by the Alameda County Waste Management Authority & the Source Reduction and Recycling Board. StopWa\$te offers:

- Comprehensive environmental assessments for large and medium-sized facilities
- Activity based cost-benefit analysis
- Funding assistance



Alameda County Waste Management Authority  
Alameda County Source Reduction and Recycling Board  
www.stopwaste.org



## Recycling

**Plastic:** Although it is light, plastic is voluminous and, after candy-scrap, was the main material filling up American Licorice's dumpsters. The many different types of plastic waste generated, including some that aren't commonly recycled, complicated recycling efforts. StopWa\$te's professional network connected American Licorice to a recycler who was able to collect their plastic film, tubs, straps, and pales. To make recycling easier, the candy manufacturer switched to more readily recyclable packaging material. A Stop-Wa\$te mini-grant helped American Licorice purchase a baler to process the plastic efficiently. Now, instead of paying \$26,000 a year to throw this material away, American Licorice sells it to the recycler.

**Cardboard:** Cost-benefit analysis revealed that a dedicated baler would improve the cost-effectiveness of American Licorice's cardboard recycling operations. Acting on StopWa\$te's recommendation, the company bought a baler for cardboard recycling and now earns significant revenues selling their cardboard instead of giving it away for free.

### RECYCLING OFFERS SWEET SAVINGS

Recycling Project	Annual Tons Recycled	Annual Savings & Revenue
Candy-waste	250	\$ 12,000
Plastic – mixed & film	50	\$ 26,000
Cardboard	180	\$ 8,000
Scrap Metal	90	\$ 2,000
<b>Total</b>	<b>570</b>	<b>\$48,000</b>

## Waste Prevention

For their next step, American Licorice wants to take their environmental performance further and prevent waste from occurring in the first place.



Currently, after candy is formed it is removed from the conveyer belt by hand and carted to one of 113 manually operated dry rooms. With this system there is a lot of variation in the drying process, which influences the texture of the candy. Licorice that isn't dried enough is moist and gummy; and if it is dried too much it is hard to chew. Candy that is not dried correctly must be scrapped; it is picked up for animal feed. American Licorice hopes to upgrade its manufacturing process by investing in a spiral dryer. The spiral dryer will be fully integrated into the main production line

and will uniformly dry candy as it travels through the circular conveyer system. The new equipment will eliminate the need to remove and cart candy by hand, reduce the amount of floor space dedicated to the drying process by one-third, and prevent 150 tons of candy waste from being produced by improving product consistency.

**Improve Your Bottom Line: 1-877-STOPWASTE  
[www.stopwaste.org/partnership](http://www.stopwaste.org/partnership)**