

AMERICAN POP CORN COMPANY



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COMPANY PROFILE

American Pop Corn Company produces the globally recognized brand of Jolly Time® popcorn. Based in Sioux City, IA, Clold Smith founded the company in 1914 and has passed on his legacy to three generations in the Smith family. Over 180 employees make up the family-owned company, operating in several buildings across the campus. In celebration of the company's 100th birthday, a Kernels of Kindness™ campaign was developed, in which \$1,000 grants are awarded to 100 individuals who bring joy, happiness, and kindness to their communities.

PROJECT BACKGROUND

Solid waste reduction is an ongoing focus of American Pop Corn Company's environmental efforts. Various forms of raw materials are either wasted or discarded throughout the production process, including excess product, production by-products and packaging waste. An in-depth analysis could illuminate process improvements, inefficiencies, or other strategies to reduce the amount of waste generated.

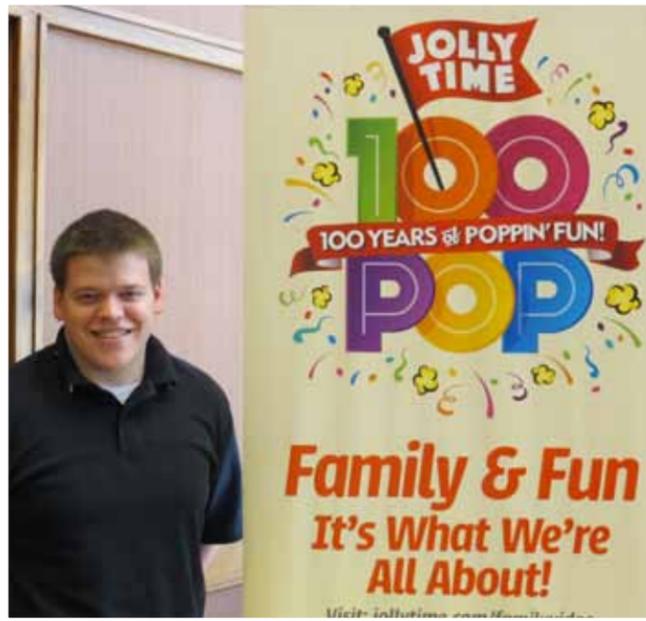
INCENTIVES TO CHANGE

American Pop Corn Company's interest in waste reduction grows out of a concern for the environment: a reduced carbon footprint has great value to the company in its efforts to continually pursue green operations. Furthermore, reducing waste can have significant implications to the company's bottom line. Efforts to increase efficiencies will lead to a higher profit margin for the company, while diverting recyclables from the landfill can create new revenue streams.

RESULTS

Net Weight Reduction: An analysis of production at American Pop Corn Company revealed that popcorn bags are often filled with product in excess of the specified product weight. An adjustment to avoid overfilling and achieve the set net product weight would optimize quality control. The quantity and cost of raw materials saved will result in an annual savings of more than \$8,000 for the initial adjustment, and 1.92 tons of recovered raw materials. After an initial adjustment to the filling process, additional adjustments will be possible, in turn increasing the savings.

Front Office Recycling: The front office of American Pop Corn Company is a high traffic area with 30 company employees and numerous daily corporate visitors. The addition of paper recycling to this office space would divert an additional 0.5 tons of recyclables from the landfill annually, and would align office practices with the company's commitment to sustainability.



Building 12 Recycling: Another expanded recycling opportunity on American Pop Corn Company's campus is presented in production Building 12. Although cardboard boxes from this location are currently recycled, cardboard tubes and plastic bags generated from product bag rolls could also be included. Increasing the recycling capacity of Building 12 to include these additional materials would reduce loads sent to the landfill by 10.11 tons a year.

Microwave Building Recycling: The same expanded recycling program developed for Building 12 can also be utilized in the microwaveable popcorn building. Similar to Building 12, this production area also produces both cardboard tubing and mixed plastics. Recycling containers strategically installed throughout the building will ensure the production flow is not interrupted by this change, and will divert 16.5 tons of waste from the landfill.

Oil Skimmer Belt: Production floors in the microwaveable popcorn building are washed thoroughly to remove residual oil. The water used to clean the floors must then go through an oil skimmer to remove the oil from the water before it is sent to sewer. By increasing the belt length in the oil skimmer by 3 feet, more belt surface area will have contact with the water, and will increase the amount of oil removed. Additionally, revenue will increase as more oil can be sold to the waste oil vendor.



CONVENTIONAL AIR POLLUTANTS AND GREENHOUSE GASES DIVERTED IN METRIC TONS

From Recommendations in Recommended Status

TOTAL FOR ALL SECTORS								
CO ₂	SO ₂	CH ₄	N ₂ O	CFC	NO _x	VOC	PM ₁₀	MTCO _{2e}
								244

PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
NET WEIGHT REDUCTION	\$8,108	1.92 TONS	RECOMMENDED
FRONT OFFICE RECYCLING	\$684	0.5 TONS	RECOMMENDED
BUILDING 12 RECYCLING	\$156	10.11 TONS	RECOMMENDED
MICROWAVE BUILDING RECYCLING	\$324	16.5 TONS	RECOMMENDED
OIL SKIMMER BELT	NOT QUANTIFIED	NOT QUANTIFIED	RECOMMENDED

