

# SUSTAINABLE SUPPLY CHAIN PROGRAM



## CASE STUDY

## Sustainability Plan Development with a Focus on Zero Waste to Landfill for Personal Care Product Manufacturer

### Challenge

In an effort to continually improve, a personal care product manufacturer located in the Finger Lakes Region is interested in achieving “zero waste to landfill”, however, there is no single recognized definition for this term as noted in the table below.

Summary of Common Zero Waste Certification Programs

Certifying Body	Zero Waste Criteria Summary	Diversion
		Rate Threshold(s)
Green Business Certification, Inc. (GBCI)	TRUE Certification	90%
UL Environment	(1) Zero Waste to Landfill	100%
	(2) Virtually Zero Waste to Landfill	98%
	(3) Landfill Waste Diversion	80%
Intertek	(1) Zero Waste to Landfill	99%
	(2) Near Zero Waste to Landfill	95%-99%
	(3) Advanced Waste Diversion	85%-95%
NSF International	Landfill Free Verification	99%

### Solution

The personal care product manufacturer requested the New York State Pollution Prevention Institute (NYSP2I) assist with the development of a Sustainability Plan with a focus on waste reduction to achieve a selected defined goal for “zero waste to landfill”. The work performed included: 1) establishing a baseline status of the current waste generation process, 2) conducting an on-site assessment to observe waste generation management practices, 3) benchmarking waste management practices at similar companies, and 4) identifying waste reduction practices.

Per NYSP2I’s findings, the manufacturer generated over 3,000 tons of waste in 2016. Approximately 91% of this waste was diverted from landfill (including hazardous waste). The manufacturer has the potential to reduce landfilled waste by approximately 9%, or about 350 tons.

### Results

NYSP2I identified gaps within existing practices and outlined steps in a Sustainability Plan that can significantly improve the effectiveness of waste diversion and achieve further waste reduction. NYSP2I has integrated pollution prevention best practices with a “5S” approach and incorporated the Sustainability Management Cycle towards continuous improvement, resulting

### CHALLENGE

- The personal care product manufacturer was interested in achieving “zero waste to landfill”, however there is no single recognized definition for this term

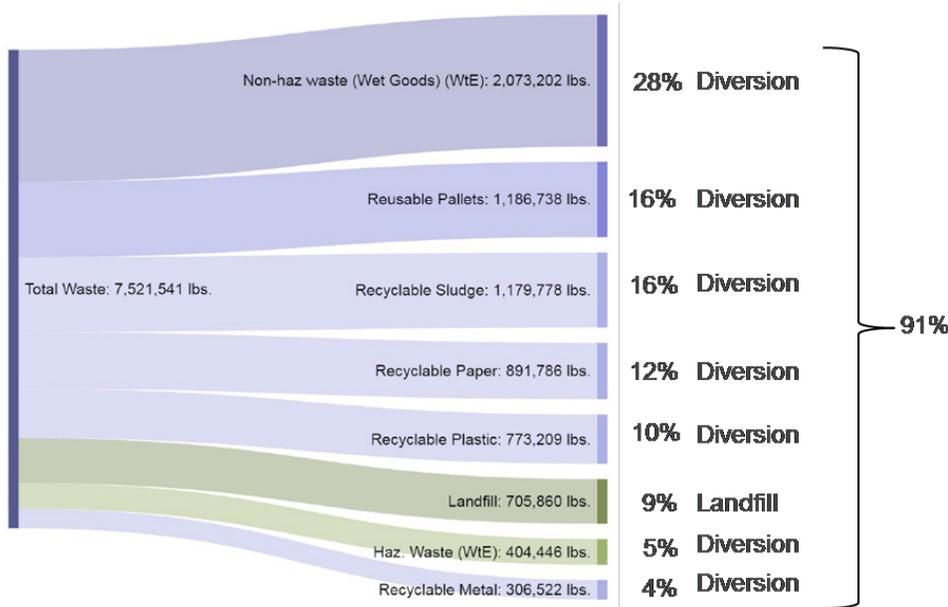
### SOLUTION

- NYSP2I assisted with the development of a Sustainability Plan with a focus on waste reduction to achieve a selected defined goal for “zero waste to landfill”

### RESULTS

- NYSP2I identified gaps within existing practices and outlined steps in a Sustainability Plan that can significantly improve the effectiveness of waste diversion and achieve further waste reduction
- NYSP2I has integrated pollution prevention best practices with a “5S” approach and incorporated the Sustainability Management Cycle towards continuous improvement
- The personal care product manufacturer is well positioned to advance its efforts towards sustainable waste reduction and achieve its zero waste to landfill goal

in a comprehensive plan. NYSP2I outlined new waste management practices for consideration including: 1) improved data tracking and integration, 2) continued institution of distinct waste bins utilizing easily identifiable visuals, 3) innovative approaches for packaging and working with suppliers, and 4) the development of a 'Green Team' to achieve zero waste goals. Additionally, NYSP2I identified alternative pathways for waste-to-energy and hazardous waste material that could result in a >25% reduction in waste management and raw material costs.



2016 Total Waste Streams (lbs.) at the personal care product manufacturer.  
Baseline was 91% diversion rate from landfill

Through NYSP2I's observations, this personal care product manufacturer is well positioned to advance its efforts towards sustainable waste reduction and achieve its zero waste to landfill goal.

## NYSP2I PARTNERS



New York Manufacturing Extension Partnership

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<sup>1</sup><https://www.ecova.com/discover/whitepaper-four-step-guide-zero-waste/>

