

# PARTNERING WITH HAULERS TO DRIVE SUSTAINABILITY

Our mutual customer is implementing Waste Metering™ technology on their front-load dumpsters to help them reach their sustainability goals of contamination reduction and landfill diversion. The following are some details on this sustainability initiative and how the technology works.



## WHAT WASTE METERING™ IS (AND ISN'T)



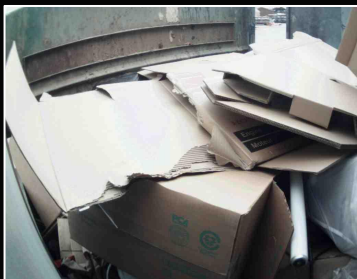
*installed dumpster camera*

### What is Waste Metering™ Technology?

- Our trained technicians install rugged camera in each requested dumpster.
- The camera takes still images of the inside of the dumpster 3-5x/day.
- Images are used to determine waste & recycling volumes and identify contamination.

### What Is It Used For?

- Identify and remove contamination in dumpsters prior to collection.
- Automatically track waste production to support sustainability initiatives.
- Optimize service schedules for each metered locations 1-2x/year.



*example dumpster image*

### What Is It **NOT** Used For?

- Switching to on-demand or “pay as you throw” collection for front-load dumpsters.
- The camera **DOES NOT** take video or audio.
- The images are **ONLY INSIDE** the dumpsters, not the surrounding area.

### What Is The Camera Installation Process?

- Installation takes 10 minutes by a trained technician.
- Involved drilling 2 tiny screw holes in the dumpster and causes no damage.
- Installation **DOES NOT** cause leaks, holes for insects, mice, etc or compromise the structural integrity of the dumpster in any way.



## IT'S EASY AND BENEFICIAL TO PARTNER WITH US

### The Benefits For You, the Hauler

- Win more business. Our customers tell us they're 10x more likely to use a hauler that uses Waste Metering™.
- Avoid contamination in your recycling stream.
- Access to dumpster data at your request and with customer approval. The data is encrypted and only shared with the customer and you.

### What This **DOES NOT** Mean For You, the Hauler

- This program is of no cost to you.
- If any cameras are damaged you are **NOT** liable.
- You **DO NOT** need to adjust your swap process. Just let our mutual customer know when a swap is happening and they'll let us know so we can remove and reinstall the camera.

### Helpful Reference Material

- [Camera Install Process](#)





**COMPOLOGY**

**Waste Metering™  
for Contamination  
Reduction**



# How Waste Metering™ Works

## CAMERA-BASED DUMPSTER MONITORING

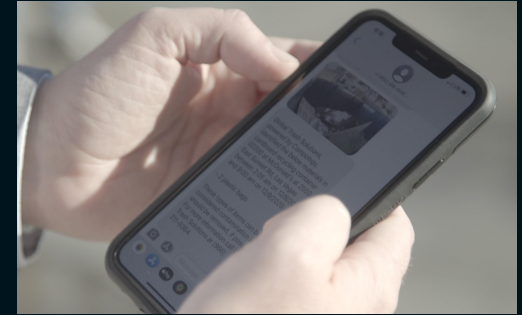


**IN-DUMPSTER CAMERAS  
TAKE PICTURES 3-5x/DAY**

Container 30-9835	
Service Verified	🗑️ 25%
1 Contaminant Added	🗑️ 55%
Serviced Missed	🗑️ 65%

**AI AUTOMATICALLY  
MEASURES:**

- CONTAMINATION
- FULLNESS
- SERVICE



**EDUCATION IS SENT TO  
GENERATORS IN REAL TIME  
AND DATA IS STORED FOR  
ANALYSIS + REPORTING**



# Compology's 13th Generation Cameras

## Mounting

1/4 inch security screws

## Communications

LTE Cellular

## Power

Non Rechargeable battery  
5 year life

## Durability

Steel + Polycarbonate construction  
MIL Spec rated  
Operational -20 °F to +185 °F





# Content & Contamination

IDENTIFY WHAT'S INSIDE YOUR CUSTOMERS' DUMPSTERS, THEN TAKE ACTION

Container 08-3546



Container 08-3546









1 Contaminant Found



# Contamination Counting

**AUTOMATICALLY IDENTIFY 6 CATEGORIES WITH 98% ACCURACY**

CATEGORY	EXAMPLES
 <b>Garbage Bags</b>	<i>Black bags White or clear bags Blue or green bags</i>
 <b>Bulky Items</b>	<i>Pallets Furniture</i> <i>Tires Crates</i>
 <b>Tanglers</b>	<i>Wires Packing straps Textiles &amp; clothing</i> <i>Hoses &amp; tubing String lights</i>
 <b>Styrofoam</b>	<i>Packaging blocks Cushion foam Packing peanuts</i>
 <b>E-Waste</b>	<i>Computers Monitors TVs</i> <i>Cameras &amp; sensors Speakers</i>
 <b>Construction &amp; Yard</b>	<i>Concrete Pipes</i> <i>Soil &amp; debris Wood &amp; tree branches</i>



# 163,000 Cameras at 1,300 brands



# Municipal Compology Installations





# Proof of Concept Case Study: SBWMA

## 2018 \$40,000 Proof of Concept Program

1. South Bayside Waste Management Authority (RethinkWaste)
2. Recology

**Goal:** Demonstrate the efficacy of camera based dumpster monitoring

**Methodology:** Install Compology cameras in 132 commercial front load trash, recycling & organics containers in 12 Bay Area cities

**“There is a limit to how many containers can be visited by Recology staff. Remote monitoring can be utilized in support of staff monitoring and for potential enforcement”**

**JOE LA MARIANA**  
EXECUTIVE DIRECTOR, RethinkWaste

READ THE [FULL CASE STUDY](#) AND [SBWMA PUBLIC REPORT](#)



# SB 1383 Case Study: BAAQMD + StopWaste

## 2019-2022 \$263,000 4-Way Partnership Program

1. Bay Area Air Quality Management District
2. Alameda County Waste Management Authority
3. Livermore Sanitation
4. Diversion Strategies

**Goal:** Provide consistent, highly-targeted education to businesses to reduce organics stream contamination.

**Methodology:** Install Compology cameras in all commercial front load organics containers in Livermore, CA

[READ THE FULL CASE STUDY](#)

80%

REDUCTION IN  
CONTAMINATION

20%

REDUCTION IN COLLECTION  
AND LID-FLIPPING COSTS



# How Does Compology Pay For Itself?

# 51%

## AVERAGE DUMPSTER FULLNESS AT COLLECTION

## Continuous Automated Rightsizing

Period Summary				Right Sizing Summary			
Duration:	6 months	Total Current Cost (monthly):	\$64,871.19	Compology Estimated Savings (monthly):	\$20,970		
Container quantity:	50	Estimated Cost (monthly):	\$43,901.35	Average Saving / Dumpster (monthly):	\$419		
Total Service Events:	3,597				<b>Estimated Savings %</b>	<b>32%</b>	
Total CuYd Collected (Lbs)	2,164,100						



COLLECTED DATA DURING SELECTED PERIOD										COMPOLOGY RECOMMENDATIONS				
Customer Name	Service Location	City	Container ID	Container Cubic Yards	Container Content Type	Current Scheduled Service Days	Current Monthly Cost	Pickups Per Week	Average Fullness At Pickup	Minimum Required Service Frequency (days/week)	Service Cadence (Weekly vs. EOW)	Service Days	Monthly Cost (estimated)	Monthly Savings (estimated)
Five Guys	#33-1740	Columbia	08-29	8	refuse	M, Th	\$935.28	1.9	47%	0.9 Weekly	F		\$593.04	\$342
Five Guys	#33-1741	Carey	04-137	4	refuse	Th	\$491.89	0.8	49%	0.4 EOW	F		\$393.51	\$98
Five Guys	#33-1742	Carey	08-44	8	refuse	M, T, W, Th, F	\$1,766.64	3.7	50%	1.9 Weekly	M, F		\$935.28	\$831
Five Guys	#33-1734	Webster	08-69	8	recycle	M, W, F	\$1,269.90	2.8	52%	1.5 Weekly	M, F		\$935.28	\$335



# Consistently Quantifiable ROI



**Category:** Quick Service Restaurants  
**Savings:** \$3,321/dumpster/year  
**ROI:** 14x annually  
**Video:** [Featured by CNN](#)



**Category:** Office  
**Savings:** \$2,757/dumpster/year  
**ROI:** 11x annually



**Category:** Retail  
**Savings:** \$3,764/dumpster/year  
**ROI:** 15x annually



**Category:** Warehousing  
**Savings:** \$1,594/dumpster/year  
**ROI:** 7x annually  
**Video:** [Case Study](#)





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NS-32DF310NA19

vs Apps Settings



YouTube

