



CANNING PLANT REDUCES WASTEWATER TREATMENT COST

The convenience and safety of canned food products makes them popular with consumers. However, tough environmental scrutiny in the process has led to changing environmental regulations and challenges for processors.

Stringent wastewater and effluent compliance standards creates a need for better wastewater treatment. As water conservation efforts in production facilities increases, the contaminant levels of the waste stream also increases

Challenge

Several canning processors asked Clean Water Technology to evaluate their wastewater treatment systems and make recommendations to clean water better and more efficiently.

Aluminum Casting Company: Two sites of the same client were evaluated and found to have different levels of contaminants.



Industry Canning Key Benefits

1. Surcharges reduced
2. Less chemical use
3. Water conservation
4. Lower sludge costs

SITE 1	BEFORE GEM	AFTER GEM	PERCENT	CHEMICALS, PH &
TSS /ppm	1,000	10	99%	20/20/10 Coag/Cat/Ani
COD /ppm	8,500	1,800	79%	pH: 6.68
Turbidity /ppm	< 1,000	5	99%	Conductivity 3,350 microS/cm
FOG	25	1	96%	
SITE 2	BEFORE GEM	AFTER GEM	PERCENT	CHEMICALS, PH &
TSS /ppm	970	12	98%	100/100/40 Coag/Cat/Ani
COD /ppm	21,000	1,700	93%	pH: 6.68
Turbidity /ppm	<1,000	22	96%	Conductivity 3,368microS/cm

CLEAN WATER TECHNOLOGY

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Pet Food Processors:

Data from two pet food processing and canning facilities is found below. The GEM[®] System testing protocol showed exceptional results.

SITE 1 PARAMETER	BEFORE GEM INFLUENT	AFTER GEM EFFLUENT	PERCENT REDUCTION	CHEMICALS, PH
TSS /ppm	430	21	95%	20/20/10
COD /ppm	2,100	600	71%	pH: 6.4
Turbidity /ppm	780	8	99%	

SITE 2	BEFORE GEM	AFTER GEM	PERCENT	CHEMICALS, PH
TSS /ppm	3,800	25	99%	20/20/100/10/15 Coag/Cat/Ani
COD /ppm	10,200	1,00	90%	pH: 6.5
Turbidity /ppm	<1,000	8	99%	

Economics

Surcharges: Utilizing the GEM[®] System to treat total suspended solids (TSS) & fats, oils, and grease, (FOG), fees and surcharges are reduced at all sites. In addition, should secondary treatment be required, the footprint can be smaller due to the higher level of removal efficiency in the GEM System.

Energy & Chemical Reductions: These costs are all reduced when utilizing a GEM System due to its patented Gas Energy Mixing features and small footprint. Savings of up to 66% have been realized when a GEM System is compared to dissolved air flotation.

Sludge cost reductions: Solids off the beach are 10-13% and reach 20-30% dryness after decant reducing sludge costs up to 60% as compared to a DAF.



G E M
Gas Energy Mixing By CWT



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Contact us today to begin a conversation!

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