



Bakery Reduces Wastewater Costs

A renowned bakery and savory manufacturer in Southern California expanded six times. Needing to comply with wastewater standards and having little space, the facility managers completely researched available wastewater treatment technologies. Choosing the GEM® System from Clean Water Technology gave them the solutions they needed.



Industry

Foods Bakery

Key Benefits

1. GEM® System adjusts to needs.
2. Surcharge savings
3. Fewer chemicals.
4. 22% less sludge.

CHALLENGE

Being sustainably minded, this facility implemented new water conservation efforts raising contaminate levels by five (5) times previous levels. While saving water was a priority, so was clean water being discharged to the city. It was determined that the company needed a wastewater treatment system to clean total suspended solids (TSS), biological/chemical oxygen demand (BOD/COD), fats, oils and grease (FOG) and turbidity. They also needed to consider:

- Footprint (they had very little space)
- Chemical efficiency (they needed to limit operational costs)
- Sludge storage, hauling and disposal (space and sludge hauling costs needed to be lowered)

PARAMETER	INFLUENT	EFFLUENT	% REDUCTION	PH COAG / CAT / ANI
TSS / ppm	1,400	20	98%	pH: 6.8 20/10/5
COD / ppm	11,000	5,000	55%	
Turbidity / NTU	2,000	25	98%	

Solution

Clean Water Technology installed a GEM System 20/75 in a 4'x9' area. In this small space, the GEM System handles flows up to 108,000 gallons per day (GPD) and simple modifications accommodated the increased solids due to the bakery's water conservation efforts.

The GEM System's use of long-chain polymers to help clean the wastewater and other chemicals to manage pH is unique. Automatic controls monitor chemical and water levels entering the tank and alarms sound when levels are not within specifications.

Spills are avoided on the operational floor with automatic water fill cycles. Operators can add polymer, set the fill cycle and walk away.

The unique long-chain polymers also produce drier sludge than conventional systems. The bakery now has 22% less sludge to store, haul and dispose.



Conclusion

The GEM[®] System is a new age primary wastewater treatment technology that out-performs conventional DAF (dissolved air flotation) systems. This bakery not only met their goals of being in compliance with the contaminant levels of effluent water, but saved significant money in surcharges, chemicals, space, and time.

The GEM System can be adjusted as production levels increase without additional construction or equipment. Simple tweaking of the patented Liquid Solid Gas Mixing (LSGM) heads, allows the system to keep up with increasing demands in flow and contaminant levels.

Contact us today to begin a conversation!