

**CASE STUDY: CAF Failure – *www/RESOURCE DAF Success!***

**Type of Facility:** Dairy Mixes, Yogurt & Juice - California

**Date Inspected:** August, 2002

**Project Scope:** Installation of World Water Works RESOURCE DAF (Dissolved Air Flotation) system to obtain consistent discharge compliance and reduce high operational costs associated with the CAF unit.

**Overview:** This dairy manufactures fluid milk, dairy-based mixes, yogurts, and juices. For several years, the facility was using a CAF system to treat its wastewater prior to discharge. The system performed inconsistently and operational costs approached \$14/1000 gallons treated. The city could not tolerate the inconsistent performance and the dairy could not afford the costs to operate the system. Many different alternatives were investigated. The dairy selected World Water Works because of their proven track record in the industry. To assure complete satisfaction, World Water Works provided the system under its **New Pay As You Save** program. **The dairy has reduced its operational costs by over 70% including the financing of the equipment and there has not been one sample out of compliance!**

**Background:** The CAF system was highly inefficient. Large dosages of both coagulants and flocculants were needed to achieve fair results. And, the results were inconsistent. It was hit or miss whether the city sample would be in compliance; and more often, it was not in compliance. The city implemented weekly testing of the dairy. The dairy employed a full-time person to operate the CAF system. Costs were continuing to escalate out of control. The dairy needed to make some drastic changes.



**CAF Removal**

**Problem Identification:** World Water Works thoroughly investigated the wastewater. The problem was complex as the wastewater varied significantly on a minute by minute basis and the political climate between the dairy and the city had soured. The solution needed to be efficient, low maintenance, provide consistent results at low costs - enter WWWW's **Pay As You Save** program.



**WWW Installation**

**Pay As You Save:** World Water Works presented a unique package to satisfy each of the customer's concerns. The package included provision of all the necessary new equipment, all the necessary chemistry, a monthly service package, a remote monitoring system, and a performance guarantee. The customer made a small initial down-payment and pays a monthly fee based upon the amount of wastewater that is treated during the month. World Water Works monitors the system remotely to assure compliance. If any parts of the system fail, World Water Works supplies replacements at no cost to the dairy.



**Results:** The customer pays for the entire WWW package at a price which is ~70% less than the previous chemical costs alone. The full-time operator is still on hand, however his duties have changed significantly. His time is now principally spent on various maintenance projects for the improvement of the dairy.



Since the installation of World Water Works system, there has not been one sample out of compliance. The city has reduced its sampling from weekly to once per quarter because of their faith in the system.



**Conclusion:** World Water Works' superior air flotation technology has provided consistent treatment performance at significantly lower costs than the pre-existing CAF system. World Water Works satisfied the customer's needs with a unique Pay As You Save package which essentially eliminated the risks associated with wastewater treatment. The dairy has a known monthly payment with no surprises, and virtually no risk of being out of compliance. The plant manager now spends time concentrating on his core competency – making dairy products. The stress, headaches and constant problems are gone. Project payback was achieved in less than a month of operation!