

QUICK FACTS

- ◆ **INDUSTRY:** Dairy & Ice Cream Producer - Oregon
- ◆ **DATE INSPECTED:** June, 2002
- ◆ **PROJECT SCOPE:** To reduce the Dairy's escalating sewer costs.

BACKGROUND

This dairy manufactures ice cream, fluid milk, and other dairy products. Escalating sewer surcharges of over \$30,000/month were a concern. World Water Works installed the www/RESOURCE Dissolved Air Flotation system to pre-treat the wastewater. Since its startup, the facility has reduced its wastewater costs by over \$15,000/month. This figure includes the cost of operating the system. The project provided an ROI of fewer than two years.

DESIGN

The customer renovated the existing wastewater treatment building to provide space for the new system. Equalization tanks designed for World Water Works specifications were installed. World Water Works provided the www/RESOURCE as well as the components necessary to properly treat the waste stream including feed pumps, chemical pumps, skid-mounted platform, touch-screen controls, etc. The process took about 6 months from purchase date to startup. The dairy's talented staff installed the equipment.



RESULTS

The startup was very successful! World Water Works' regional chemical partner; Wesmar, provided an efficient chemical program based on an analysis of the dairy's waste stream. The program worked without pH adjustment. The water is treated at a pH of approximately 5.5. This maximizes oil and grease removal.

The polypropylene design assures system longevity even in these corrosive environments. In fact, World Water Works provides a 10-year warranty on the vessel. The removal efficiencies matched anticipated results. The customer immediately witnessed a reduction in sewer costs. The following table (provided by the customer) shows the dramatic reduction in overall costs witnessed immediately upon startup.

AVERAGE DICHARGE COST & CONCENTRATIONS (Before & After)

| | SEWER \$ VOLUME | BOD PPM | BOD \$ COST | TSS PPM | TSS \$ COST | TOTAL COSTS* MONTHLY |
|-----------------------|--------------------|------------|----------------|------------|----------------|----------------------------|
| BEFORE | \$9,027 | 3290 | \$14,876 | 1600 | \$8,889% | \$32,834 |
| AFTER | \$9,184 | 698 | \$2,940 | 167 | \$12 | \$15,106 |
| REDUCTION | -2% | 79% | 80% | 90% | 100% | 54% |
| TOTAL MONTHLY SAVINGS | | | | | | \$17,728 |

