

Providing naturally pure, healthier water.

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ProMossTM for Farms

By: David R. Knighton MD, Co-Founder, President and Chief Executive Officer

Creative Water Solutions is currently in beta testing with water treatment for animal husbandry in the hog and dairy cow segments of the market. Since the federal government outlawed prophylactic administration of antibiotics for farm animals, water quality and purity has become a critical issue in animal health.

We are finishing a six-month beta test on a sow facility outside Morris, MN. We did a water analysis of the needs of the sow barn and designed a system to deliver adequate amounts of ProMossTM treated water to satisfy the needs of the sows and the maintenance of the facility.

Since the beginning of the test, the facility reported

- No plugging of the watering nipples requiring manual cleaning
- Excellent water delivery to the herd regardless of the amount of maintenance being done
- Vigorous, healthy piglets and sows

We will receive the six-month data at the end of the year to analyze birth rates. Births per sow will also be available. Birth weights are not recorded at this facility. Based on these results, the owner of this large hog operation will expand ProMossTM treatment to the nursery barns and then to the finishing barns.

We are also going to test ProMossTM treatment in three dairy facilities in Minnesota. We will study the effect of ProMossTM treated water on milk production, milk quality, incidence of mastitis, and health of calves. We will also monitor effects on water troughs, plumbing and scale formation, clogging of heat exchangers to cool milk, and water use.

This expansion into the animal husbandry industry is an exciting extension of the success we've had in industrial water treatment.



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Water Treatment: Cooling Tower & Absorption Chiller

By: Dan Cook, Conservation Solutions Corporation

THE PROBLEMS

The Zambarano Hospital replaced their window air conditioners with a central cooling plant with a cooling tower and absorption chiller. They wanted to provide first class water treatment without polluting the water with hazardous chemicals since the cooling system is adjacent to the lake that supplies water to the hospital.



Zambarano Hospital, Pacoag, RI



FlowMark Chemical-Free Electronic Water Treatment System with conductivity meter, probe and blow-down assembly.

THE SOLUTIONS

A *FlowMark Chemical-Free Water Treatment System* was installed on the 300 ton steam powered absorption chiller and cooling tower. In addition, a bag filtration and *Creative Water Solutions ProMoss™* system was installed to maintain clean water in the cooling system. This system eliminates hazardous chemical use for the cooling system. The biological counts are consistently less than 500 CFU/ml, corrosion is controlled and the water in the cooling tower is crystal clear. The Zambarano Hospital has invested in a "greener" water treatment technology with significant financial benefits: Increasing cycles of concentration resulting in water and sewer savings; eliminating organic contamination & calcite scale saves energy, and the hospital staff enjoys a cleaner and safer working environment since biological control in the cooling tower is guaranteed without hazardous chemicals. Finally, toxic chemicals from the cooling system do not adversely impact the hospital's water treatment plant.

THE RESULTS

- 1. Eliminated hazardous chemicals
- 2. Saved energy & water
- 3. Reduced impact on sewer plant
- 4. Improved working environment for staff by eliminating the need to handle chemicals
- 5. "Greener" building