

CASE HISTORY

CLIENT: Municipal
LOCATION: Whitehall, NY
APPLICATION: Potable Water Reservoir
PRODUCT: LemTec™ Modular Insulated Cover System

BACKGROUND

The Village of Whitehall is located in upstate New York, just a few miles from the Vermont border. The community recognized the need to upgrade their existing drinking water storage reservoir due to problems with disinfection. UV radiation and continuous algae blooms caused chlorine demand to vary dramatically. Corrective action was needed to eliminate these daily fluctuations and maintain constant and predictable chlorine residual.



PROJECT INFORMATION

The 27,400 ft² potable water reservoir needed to be covered to reduce chlorine demand, eliminate algae blooms and prohibit waterfowl from using the basin. The unique characteristics of the reservoir required an innovative design to overcome the limitations of the site. Sharp jagged rocks, irregular contours and space limitations resulted in a custom design that addressed all the needs of the site.

LEMTEC™ SOLUTION

To upgrade the facility, the Village of Whitehall selected the LemTec™ Modular Cover System. Dr. Frederick Hardt, P.E. stated, "Several solutions were reviewed to solve the algae control problem for the Village of Whitehall. The LemTec™ Modular Cover was the only cost effective solution that could completely solve the problem."

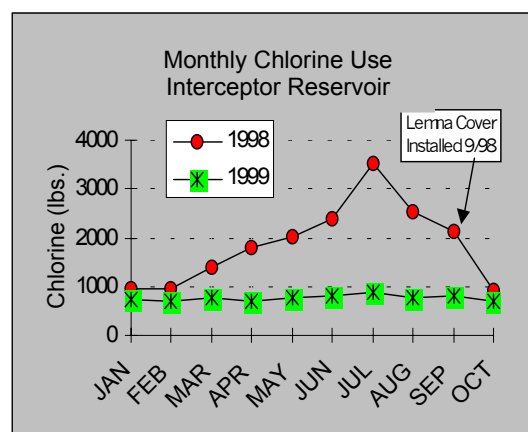
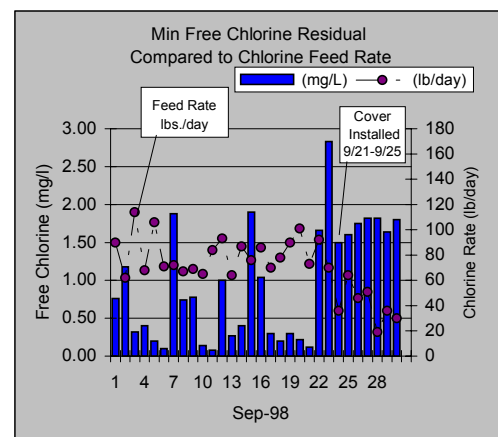
The LemTec™ Modular Cover proved highly effective in stabilizing residual chlorine levels. In fact, the cover was so successful, the village discontinued it's effluent chlorine feed station that was previously required for re-dosing when residual chlorine dropped below permit levels. The LemTec™ Modular Cover System enabled the plant to perform successfully, and create an effluent of high quality, exceeding the minimum water standards.

RESULTS

The installation of the LemTec™ Modular Cover System resulted in a major reduction of daily chlorine use. Before the cover was installed, chlorine demand varied drastically from week to week. After the cover was installed, chlorine levels remained constant. The consistency and predictability makes it much easier to anticipate operational needs and control budget costs.

The LemTec™ Modular Cover System is a cost-effective solution for meeting disinfection requirements.

A review of annual costs before and after installation of the LemTec™ Modular Cover System is revealing. Before the LemTec™ Modular Cover System was installed in September 1998, the monthly average chlorine demand was 1692 lbs. After the cover was installed, the monthly average dropped significantly to 760 lbs., a reduction



of 55%. This represents a substantial cost savings in chlorine and O&M costs for the Village.

According to Don Williams, Department of Public Works Foreman, *"The LemTec™ Modular Cover System is the best investment the Village of Whitehall has made in my 25 years of service!"*

For more information, please contact:

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