PROJECT BRIEF: CURTISS, WI

Restoring Compliance and Ensuring the Future

CUSTOMER PROFILE

The Village of Curtiss (Village), located in north central Wisconsin, operates an aerated lagoon system for treatment of the Village’s wastewater.

PROJECT SUMMARY

Increased loading at the Village of Curtiss found the existing lagoon system unable to meet the treatment requirements. Faced with NPDES permit violations, and under pressure from the Wisconsin Department of Natural Resources to find a solution and implement it quickly, the Village’s consulting engineer turned to EDI for assistance. The resulting replacement allows the Village to meet discharge requirements and the long-term maintenance contract assures compliance going forward.

REPLACEMENT AERATION SYSTEM TREATS INCREASED LOADING, HELPS ENSURE COMPLIANCE

EDI’s team analyzed the loading coming into the treatment facility and found it much higher than what the original EDI diffused aeration system had been designed to treat. Confounding the treatment difficulties, the staff at the Village had been unable to keep up with the maintenance requirements during the fifteen years of operation. Leaks in aeration header pipes and tears in baffles caused inadequate aeration distribution, dead zones and short-circuiting, further compromising treatment.

EDI’s team proposed and installed equipment with a greater capacity to better meet the higher loading conditions and provide more stable performance. The new system includes a retrievable diffuser array, to facilitate maintenance of membranes while expediting the inspection and maintenance tasks. The replacement equipment improved the performance of the system, and the Village achieved compliance within the deadlines set by WI DNR.

Highly satisfied with the results, the Village contracted with EDI Aeration Works for ongoing maintenance and continued service support. The maintenance contract carries a system warranty and extends it into the future helping to assure continued compliance and worry-free maintenance.

“The professional team from EDI quickly evaluated our needs and was able to design, install and maintain our existing system with higher-capacity diffusers. This gave us the increased performance at a time it was really needed. The on-site crew also found breaches in the baffles and was able to replace those to eliminate short-circuiting and stabilize treatment. With EDI taking over our lagoon maintenance, I can rest easy knowing we are in compliance and are going to stay that way.”

-Todd Weich, Village of Curtiss Public Works Operations Manager

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