

CHEMICAL METERING PACKAGE MEETS ENVIRONMENTAL GUIDELINES

THE CHALLENGE

A municipality in Manitoba needed a solution to regulate pH and phosphate levels in treated water before discharging it into the Red River. The outdated system struggled to handle increased flow from growth, contributing to phosphate buildup. While ferric chloride removes pollutants, its acidity lowers pH, requiring sodium hydroxide to restore balance. Using their existing technologies to achieve the new demands would have been costly in terms of both capital and space requirements. The municipality needed a solution to manage dosing, ensure efficiency, and meet operational and durability standards.

THE SOLUTION

A custom chemical metering and transfer skid featuring the Pulsafeeder Eclipse E25 Pump, designed to provide a complete turnkey solution for both dosing and transfer flows. It also delivered cost-effective performance and a small footprint. The Eclipse E25 was particularly well-suited to this application due to its ability to handle higher flows than traditional dosing pumps at a reasonable cost. Its continuous flow design allowed the client quicker response times to changing conditions, providing the added benefit of reducing chemical consumption. This solution effectively addressed the immediate need to manage pH levels and chemical dosing while ensuring compliance with environmental standards.

For more on this case study or to discuss your fluid handling challenges, contact us today!



MUNICIPAL | CHEMICAL METERING PACKAGES PULSAFEEDER ECLIPSE E25 PUMP PROVIDES RELIABLE CHEMICAL DOSING

TECHNOLOGY

[Pulsafeeder Eclipse E25 Pump](#)

FEATURES

- **Precise Dosing of Chemicals:** Accurate metering of ferric chloride to remove pollutants like phosphate from wastewater. Controlled dosing of sodium hydroxide to adjust and raise pH levels back to a neutral state.
- **Seal-less Design for Corrosive Fluids:** Ideal for handling highly corrosive chemicals. This feature prevents leaks and reduces the risk of chemical exposure, ensuring safe and reliable operation in the treatment process.
- **Flexibility and Maintenance Efficiency:** Durable design and high-flow capability makes it versatile, functioning as both a metering and transfer pump. Fresh water flush feature prevents chemical buildup, ensuring efficient operation and easier maintenance for optimal pH control.