

Optimizing Exchanger Maintenance in the Oilsands

Team Viking was engaged by a client in the oilsands sector who was experiencing significant performance issues due to underperforming heat exchangers. These issues resulted in increased maintenance requirements, reduced asset availability, and overall process inefficiencies.

Leveraging Viking's strong collaboration with facility engineers, operations, and maintenance teams, we implemented a targeted maintenance solution. This approach successfully reduced the client's annual exchanger cleaning purchase order from over \$3 million to \$1.6 million—a substantial cost savings attributed solely to direct labour and service costs. The client later reported that the overall savings were significantly higher when factoring in broader operational benefits.

In addition to cost reduction, the improved exchanger performance led to reduced firing rates, lower system pressurization, and a shift to a high-frequency, low-impact maintenance strategy—enhancing process reliability and sustainability.



Following the successful implementation of a new maintenance strategy, Team Viking continued to identify and deliver further optimizations and cost savings across the facility. Key initiatives included:

- Transitioning from generator to shore power: By sourcing and providing shore power, Viking eliminated the need for temporary generators, reducing fuel costs, emissions, and safety risks associated with portable power solutions.
- Streamlining work execution: Through the optimization of work plans, Job Hazard Analyses (JHAs), permitting processes, and Lockout/Tagout (LOTO) procedures, Viking reduced average exchanger cleaning time from 12 hours (one full shift) to as little as 4 hours. This not only minimized equipment downtime but also significantly increased overall plant availability and performance.

These improvements enhanced the overall safety of maintenance operations by reducing exposure time and simplifying execution steps. The cost-effectiveness of the new processes, combined with improved reliability and asset availability, further strengthened the facility's operational performance.

This collaborative approach with the client has been instrumental in driving long-term success and sustainable improvements across the site.

By challenging conventional methods and embracing innovation, Team Viking delivers a safer, more efficient, and environmentally friendly solution. The success of this project highlights the value of customized solutions and the potential for technological advancements to transform established industry practices.