

FROZEN VEGETABLE SUPPLIER

QUICK FACTS

- ◆ **OWNER:** Frozen Vegetable Supplier
- ◆ **INDUSTRY:** Food & Beverage
- ◆ **REGION:** Pacific Northwest

BACKGROUND

A frozen vegetable company was the premier supplier of individually quick-frozen onions, potatoes, roasted potatoes and vegetable blends to large food service companies. At their processing facility, a significant barrier to growth was faced due to an aging wastewater treatment system, which could not treat the anticipated flows that a plant expansion and production increase would generate. The lagoon based system would also periodically discharge an offensive odor during periods of high loading close to local houses and residence. With so many potential negatives tied directly to the existing wastewater treatment system, the company sought a solution that would address immediate and long-term business needs and further improve its longstanding record as responsible corporate citizens.



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SOLUTION

The heart of the wastewater process for the facility was a large lagoon where vegetable production waste streams were biologically treated. The system included large blowers, air diffusers and piping systems that were difficult to operate and maintain. In addition, they were prone to mechanical and process upsets and failures. With a physical footprint comparable to that of a football field, the system also tied up valuable real estate for a process that lacked the ability to scale with the company's growth plans. The company looked at various options, including another larger lagoon-based system. With this approach, the company would have faced significant costs to remediate the original lagoon to work in conjunction with the new one. Upon a full review of treatment options, the company opted for an Ideal MBBR™ system proposed by World Water Works, Inc. The footprint of the MBBR is significantly smaller and allowed the user to decommission the existing lagoon and recover the precious space it occupied. The MBBR system design meets the facility's immediate needs and offers flexibility to scale significantly as the company grows, maintaining compliance at each step.

The project involved multiple stages including the initial design, engineering and project scope. Once awarded, the project was completed within six months, and the facility began migrating from using the lagoon based system to full production utilizing the MBBR system (60 days), allowing for the acclimatization of the MBBR. The entire project was constructed with no interruption to the existing wastewater treatment system or the production facility.

CONCLUSION

Following the successful transition to the Ideal MBBR system, the facility is exceeding the designed effluent requirements. The company is reporting improved operation since the conversion the WWW MBBR technology. They are experiencing fewer failures, easier operation, improved performance all in a smaller footprint. Finally, with the odor issue resolved, the company has enhanced its standing as a good neighbor, and ultimately as a premier company and employer in the region. With substantially improved stability and reliability of the system, they have been able to eliminate expensive surcharges from the city, met all the needs of the community and achieved its own long-term business objectives.

