

A Case Study



Client: Hunts/ConAgra Foods
Location: Helm Plant, California
Type: Domestic & Industrial Wastewater Treatment Facility

Hunts/ConAgra Foods, located in Helm, California, processes over 300 tons of tomatoes per hour. It is believed to be one of the biggest plants of its kind. The plant employs an innovative transport system, using a flume of water to convey tomatoes unloaded from trucks, carrying 5-10 tons of tomatoes each. This conveyor system generates over a million gallons of wastewater, with very high solids loadings. In the summer, the temperature in Helm often reaches 100-110°F.

This extreme heat caused caking of solids on the surface of the lagoon, which led to terrible odors within the plant. And because there was no aeration in the pond, high levels of BOD caused anaerobic conditions, also contributing to the odor problems.

To alleviate the caking and odor problems, it was determined that horizontal mixing aerators should be integrated into the operation. The high mixing efficiency and aeration capabilities of the TORNADO Aspirating aerator made it an ideal choice for this application. The horizontal mixing capacity of the (4) 20HP TORNADO aerators installed in the holding lagoon, created circulation which prevented solids from forming on the surface, minimizing the level of caking on the basin. At the same time, the added oxygen from the aerators not only reduced the levels of BOD, but also established an air cap just below the surface, trapping odors.

Within days of the installation, the aerators had already decreased the floating solids and cleared the odor problems.

