



Food Processing Treatment Products

Big Dipper Ice Cream Factory

Big Dipper is a local ice cream manufacturer in Prospect, Connecticut. It has won numerous national awards, and includes United States Presidents among its customers. The ice cream is manufactured on the premises with its last production shift ending at 10:30 pm. Approximately 2,000 gallons of wastewater with significant amounts of butterfat grease and other wastes are produced on a daily basis.

The wastes produced from this operation are discharged into a 1,200-gallon septic tank with four sets of leaching fields connected by junction boxes. These would all need to be pumped out every three to four months to prevent system failure. The septic tank usually had a 12-18 inch layer of hard grease that made pumping difficult. The junction boxes typically had a one half inch thick layer of the same grease coating the box and piping. When the tank and junction boxes were opened there was a strong unpleasant odor.

Treatment began using Lacto-Bac, a bacterial product specifically developed to target and degrade lactose-based wastes. An automatic metering pump system was installed to introduce 10 ounces of Lacto-Bac daily into the waste collection system one hour after the last shift.

After six months of treatment, the accumulation of solids in the bottom of the septic tank was reduced by 30-40%. The grease layer decreased from 12-18 inches to 3-4 inches, and was of a much softer consistency, enhancing the removal process. The junction box leading to the third set of leaching fields was completely clean, and the odor was greatly reduced.

Lacto-Bac proved to be an effective waste minimization treatment, reducing the overall volume of waste and the cost of its removal, while greatly extending the life of the system.