

Case Study

First BioCon® US Installation

KRÜGER

Plant Highlights

Plant Capacity

Average Daily Flow	0.3 MGD
Max Month Flow	1.0 MGD
Peak Flow	2.6 MGD

Dryer Design Data

Annual Sludge Production (dry)	1,466 tons
Dryer Plant Capacity	1,100 lb cake/hr
Inlet Biosolids Solid Content	25%
Outlet Biosolids Solid Content	>90%
Biosolids Production Rate	305 lb/hr
Plant Evaporative Load	795 lb H ₂ O/hr
Plant Operational Time	2,660 hrs/yr

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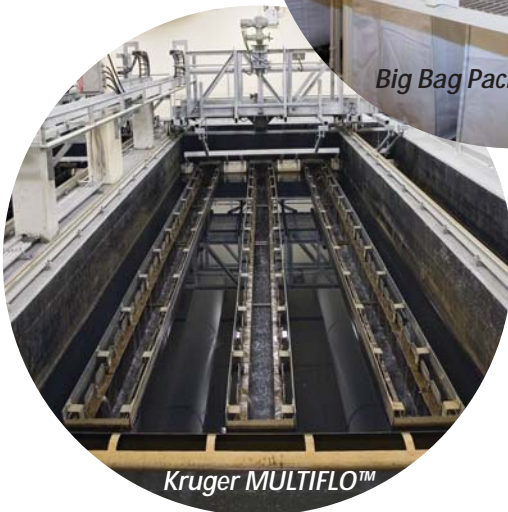
In the winter of 2007, the first BioCon® Biosolids Drying Plant went online. Since then, the plant has successfully produced dried biosolids efficiently, with low emissions and with minimal operator oversight in comparison to other biosolids treatment technologies.

The community's environmentally friendly focus led them to build one of the most technically advanced wastewater treatment plants in the state of Minnesota. This plant marks the first BioCon® Dryer installation in the United States. The BioCon® drying process produces a Class A product which the community will utilize in a beneficial way as compost or fertilizer. The biosolids will be used for landscaping in agricultural lands as well as flower beds around the community. Another option to consider is using the product as a waste to energy fuel source.

The BioCon® drying plant meets the community's agricultural needs by producing a dried, Class A product, that is easy to handle and spread out. The biosolids produced from the facility are dried to greater than 90%. The dried biosolids are stored in 70 ft big bags.

Liquid Biosolids

The biosolids are extracted from the wastewater through Kruger's BIOSTYR® (Biological Aerated Filtration) and MULTIFLO™ (Enhanced Clarification) processes. Furthermore, the solids are also polished out in a tertiary membrane system. The solids produced are stored and concentrated in an aerated sludge holding tank. The liquid solids are dewatered to 18-25% dry solids by two belt filter presses. After dewatering, the biosolids cake is conveyed to a wet sludge cake bin tank. The cake bin holds enough material for 24 hours of dryer operation.



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