## XR-5® Covers the World's Largest Anaerobic Membrane Bioreactor System

**JUNE 2010** 

## XR-5® Covers the World's Largest Anaerobic Membrane Bioreactor System at Food Processing Plant in Marlborough, Massachusetts

The world's largest anaerobic membrane bioreactor system (AnMBR) installed at Ken's Foods in Marlborough, Massachusetts incorporates an XR-5 geomembrane cover by Seaman Corporation. The system is part of a newly upgraded wastewater treatment facility at Ken's Foods, where salad dressing and barbeque sauces are processed. This unique



AnMBR system is a relatively new technology and was developed by ADI Systems, Inc. in Canada, in cooperation with Kubota Corporation of Japan. At Ken's Foods, the technology is used to process challenging wastewaters with high levels of organic content, while generating enough biogas to supply 100% of the heat required for the treatment plant's daily operation. The biogas is also sufficient for supplying hot water for other requirements at the plant.



The XR-5 geomembrane is installed as part of a cover system developed by Geomembrane Technologies, Inc. (GTI) of Canada. The XR-5 material covers the AnMBR basin, providing a gastight seal with biogas collection capabilities. Each of the system's four anaerobic

basins has a retractable, structurally-supported cover system custom designed by GTI. The cover systems consist of an XR-5 fabric cover tensioned over a series of stainless steel arches. These patented covers provide a gastight seal for capturing the biogas. The biogas is then returned to the gas scour system for reuse.

XR-5 is ideally suited for this application because of the membrane's ability to withstand exposure to high concentrations of oils and greases, high liquid temperatures, methane gas, UV rays and varying ambient conditions.

To view a PDF about this specific anaerobic application for wastewater management, visit ADI Systems, Inc's website by <u>clicking here.</u>

Further information on GTI's covers systems is available at www.gticovers.com.

To read more about similar applications using XR-5, click here.

For more information about XR® Geomembrane Systems please contact **Bill Shehane** by phone at **(330) 262-1111** ext. **3003** or email at **bshehane@seamancorp.com** 

