

# HUMBER WASTEWATER PLANT, DIGESTER NOS. 1 & 2

One of four City wastewater treatment plants, the Humber Wastewater Treatment Plant is Toronto's second largest, currently serving a population of approximately 650,000 throughout Etobicoke, York, North York and Toronto. Tnemec coating systems have been getting noticed at the "Humber," with two digesters completed and another three in the works.

CH2M Hill specified Tnemec products for the lining of the digester in 2004. "They needed a lining system that could hold up and perform seamlessly in the anaerobic digestion process," explained Walker.

Following abrasive blast cleaning of the 12,000-square-foot concrete area in accordance with SSPC-SP13/NACE No. 6, ICRI CSP5, Series 218 MortarClad, an epoxy-modified cementitious resurfacer, was spray-applied then troweled to fill voids and bugholes and to achieve a smooth finish. Series 201 Epoxoprime, a high-solids polyamine epoxy primer, was roller-applied to the surface to reduce outgassing of the system's topcoat, Series 406 Elasto-Shield. A two-component, fast setting, hybrid aromatic polyurethane coating, Series 406 was then applied at a minimum of 80.0 mils DFT to the interior surface of the lid, including the upper 10 feet of the digester's walls and columns, using heated plural component spray equipment.

Series 406 is a high performance coating designed to provide a durable lining in a single coat application, providing excellent chemical, thermal shock and abrasion resistance. "Elasto-Shield is designed for this environment," noted Walker. "It's no wonder it's becoming extremely popular for use in wastewater treatment plants."

"Other similar materials will often run and sag at these thicknesses," added Vice President of Algoma Contractors Gene Fortino. "Elasto-Shield allows us to complete the work faster and move on to the next area."

## FEATURED PRODUCTS

- Series 201 Epoxoprime
- Series 218 MortarClad
- Series 406 Elasto-Shield



## PROJECT INFORMATION

### Project Location

Toronto, Ontario, Canada

### Project Completion Date

January 2006

### Owner

City of Toronto

### Architect / Engineer

CH2M Hill - Toronto, Ontario

### Applicator

Algoma Contractors, Inc. - Stoney Creek, Ontario

Designed to provide a durable lining in a single coat application, Series 406 Elasto-Shield protects the interior of Digester Nos. 1 & 2 at the Humber Wastewater Treatment Plant in Toronto, Ontario.

