PROJECT:

Water Treatment from Pipeline Hydrostatic Testing

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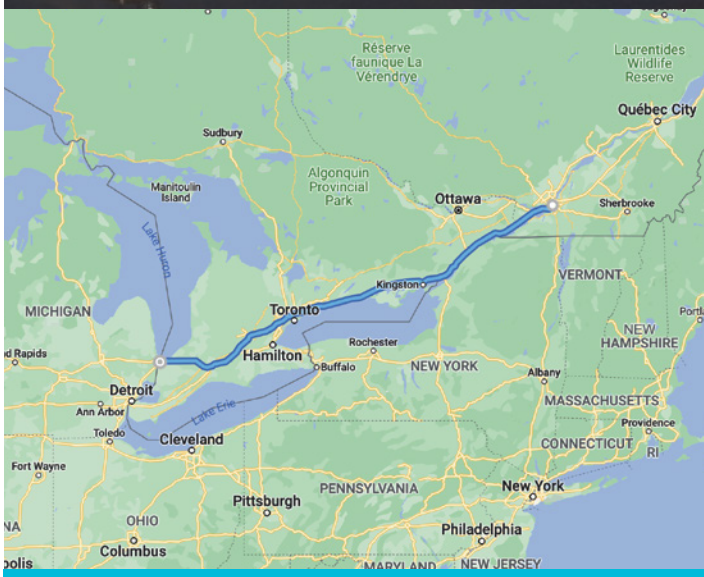
CHALLENGES

- The contaminated water had to be treated quickly before freezing temperatures
- Strict requirements had to be met to meet petroleum industry standards

BACKGROUND

As part of hydrostatic testing on sections of a pipeline linking Sarnia to Montreal, more than 31,000 m^3 of water, containing a dye additive, was contaminated.

The generated water, stored in a 37,000 m^3 tank, had to be treated quickly and discharged into the MMC sanitary sewer before freezing temperatures set in. The operations needed to be carried out in compliance with the petroleum industry's strict health and safety requirements.



WATER TREATMENT

Project location:	Sarnia, Ontario to Montréal, Quebec
Quantity of water treated:	37,000 m^3
Project date:	2016

SOLUTION DEVELOPED

The water was pretreated by introducing into the tank, during initial filling, a coagulant and flocculant via the tank's 30 cm diameter transfer line.

Following a brief settling period, a second pretreatment was performed in the storage tank via closed loop chemical oxidation.

Next, the pretreated water was decontaminated using a series of filters positioned as follows:

- Sand/anthracite
- Bag-type
- ULTRASORPTION™ media
- Granular activated carbon

The contaminated water was treated over a period of 3 weeks at a maximum flow rate of 1,390 L/min (2,000 m^3/day) before being discharged into the municipal sanitary sewer system.

The treatment performance was such that the strictest standards for discharge into storm drains were also met.

CONTACT

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