

## Service and Troubleshooting



### Case Study Details

#### Summary

The City of Peterborough, Ontario, Canada, purchased a UV disinfection system from Trojan Technologies model 3000 Plus with automatic mechanical chemical cleaning to disinfect the treated effluent from their sewage treatment plant. The system's capacity is 55,000 m<sup>3</sup>/day and the peak flow to be treated is 130,000 m<sup>3</sup>/day.

The Trojan 3000 Plus UV disinfection system is installed in three parallel channels and operates continuously with a PLC controlled flow and UVT pacing capabilities. Peterborough's sewage treatment plant has been flooded previously on a couple of occasions but that was prior to installing the UV system.

When the storm hit in July 2004 for the first time since the installation of the UV system the facility was submerged in a foot or more of water and many electrical components of the disinfection system were damaged and completely out of operation. Intervention had to be immediate and efficient.

## Service and Troubleshooting

### Background

Peterborough's STP discharges the treated water in one of the tributaries of the Trent river. The receiving body is considered critical as it has low flows and has protected species. Disinfection had to be by UV to avoid chlorine compounds in the effluent of the sewage plant. So when the plant was flooded and the disinfection system damaged the intervention by Trojan's service team had to be as prompt as can be and the repairs as swift as possible.

### Action

The morning after the flood H2flow was contacted by the city's operators and a brief description of the damage was mentioned. Derek Anderson and Tony Gavican of the Service team informed Trojan of the need of parts to replace the damaged ones as soon as possible and to be couriered to site.

The closest one of them to the site immediately went to the sewage plant to assess by himself the damage and ensure, by communicating immediately with Trojan's parts department, that the right parts and the right numbers of parts are being sent.

The team then stayed on site and worked side by side with the plant's operators salvaging as many functioning parts as possible and by using spare parts available at the plant, grouping UV modules in a way to be able to provide some disinfection until the needed parts arrive.

Once the needed parts arrived Derek and his team supporting the plant's operators were able to put back the system in operation in less than a week after the damage occurred and the disinfection system was back in full operation. PLC panels had to be replaced, communication board and customised operating software reinstalled.

### Results

Peterborough STP's staff was satisfied with H2flow's service team and keeps in touch for all its needs on the UV side of things.