

UV Pure® Case Study	
Application:	Industrial/Commercial Projects
Solution:	Hallett® Systems
Location:	Alberta, Canada



Pure, safe water.  
*Always.*

## Wastewater Plant Manufacturer Switches to Hallett® for its Wastewater Treatment Systems.

A western Canadian manufacturer designs and installs turn-key wastewater treatment systems for heavy industries such as mining and gas camps. Their systems include UV technology as a final stage of treatment before discharge. Recent trials using the Hallett® system caused the company to switch from a competing UV system they had been using in the past, because the results were significantly superior with the Hallett® system.

### CUSTOMER'S PROBLEM

The Manufacturer uses UV systems as a component in their portable, above ground wastewater treatment plants. These treatment plants are supplied to mining and gas camps throughout North America. The key measure of success for these systems is the coliform count of the effluent, which must not exceed 200 ppm to meet regulatory standards. Our customer was finding the current UV systems were not sufficiently reducing the coliform count to the minimum standards. This triggered a search for an alternative UV technology.

### THE SOLUTION

The customer's Operations Manager, learned about Hallett® systems at an industry conference in the Spring of 2005. He immediately recognized that the Crossfire technology® would overcome the unique treatment challenges of wastewater. He commissioned a comparative trial between the competing UV product that the customer was already using, and a Hallett®13.



### HALLETT® OUTPERFORMS CONVENTIONAL UV BY FACTOR OF 10+ IN THIRD PARTY TESTS

The results of the lab tests are summarized in the chart below.

Results of third party microbiological analysis, May 18, 2005, Norwest Labs, Edmonton, Alberta		
Effluent Sample	Total Coliform (ppm)	Fecal Coliform (ppm)
Immediately prior to UV treatment	310000	1800
Conventional UV system	17000	33
Hallett® system	800	3

### CUSTOMER'S PLANS GOING FORWARD

Based on test results, the wastewater plant manufacturer is making a total conversion to Hallett® systems. "The lab test results confirmed that Hallett® systems are the way to go. We're now using Hallett® for all new production, and we'll be retrofitting all old plants with Hallett® as well. With UV Pure® systems, we can consistently achieve our target coliform levels for effluent. We're also really pleased that the maintenance costs are significantly reduced. With the Hallett® systems, we've eliminated quartz breakage when changing lamps, and the wiper cleaner and easy lamp changes means that maintenance levels have been minimized." Operations Manager, Wastewater Plant Manufacturer.