

## McVean Pumping Station Odour Control



### Case Study Details

This project involved installation of a complete and operable biofilter odour control system for McVean pumping station Located in Brampton, Ontario. Design criteria were as follow:

System capacity: 5,300 cfm

Inlet Temperature: 5-40 °C

Maximum/ Average Inlet H<sub>2</sub>S: 150ppm/25ppm

H<sub>2</sub>S removal efficiency ≥99%

Inlet Humidity: 60-100%

Organic compound removal ≥70%

H2Flow supplied a 5,300 cfm BIOFILTAIR™ from BIOREM for H<sub>2</sub>S and organic compounds removal from the air. Biofilters operate based on biofilm principals. Odorous compounds in the air entering biofilter cells are solubilised into the moisture layer or directly absorb to the surface of filter media. Bacteria present in the biofilm of the media utilize compounds as substrate and produce CO<sub>2</sub>, H<sub>2</sub>O and inorganic salts as end products. Clean air is then discharged to the atmosphere.

There are many advantages of using the BIOREM technology for odour control purposes. Examples are high acid buffering capacity, small footprint, high physical adsorption, chemical resistant, regenerable media, fire and frost resistant and many more advantages. The project has been successfully in operation for five years and satisfied the air emission regulations and odour control requirements.

**Buyer:** Regional Municipality of Peel

**Supplier:** H2Flow Equipment Inc.