

# Battery Point, NS

The Battery Point Sewage Treatment Plant | Case Study

## The Client

**The Battery Point Sewage Treatment Plant in north-end Sydney** was built after The Cape Breton Regional Municipality (CBRM) created a Sydney Harbour clean-up program following concerns and studies showing very poor environmental quality in the harbour. One of the sources of contamination was due to untreated sewage run-off. Reducing and removing contaminants from the wastewater was the main purpose of this construction in 2004.



## Key Technologies

- John Meunier ESCALATOR® Fine Screen
- John Meunier ROTOPAC® type RPW Screw Washer Compactor

## The Client's Needs

The Battery Point WWTF was commissioned in 2005 and included a grinder followed by a perforated plate rotary fine screen with auger in the headworks building. However, the plant found most of the screenings were grinded up to a size smaller than the perforations of their screen and passed right through into their treatment process to reform as clumps.

The new equipment had to be a complete retrofit into the existing channel to replace the grinder and the screen that resulted in frequent maintenance of downstream equipment which is both time consuming and costly.

## Our Solution

Veolia Water Technologies Canada (VWTC) reviewed the site requirements with our local representative and the customer, and were able to retrofit the following technologies into the existing channel to handle the plant's peak flow of 43m<sup>3</sup>/min.

The technologies supplied are:

- **One John Meunier ESCALATOR®** fine screen capable of removing all solids above 6 mm. It was installed in a 1372mm (W) x 1345mm (D) at an angle of 45°. The design included an integrated pivoting system which allowed the screen to be pivoted out of the channel for maintenance without removing the compactor (external lifting device required).
- **One John Meunier ROTOPAC®** RPW Screw Washer Compactor for screenings collection, washing and compaction. The compactor is located directly under the screen discharge.

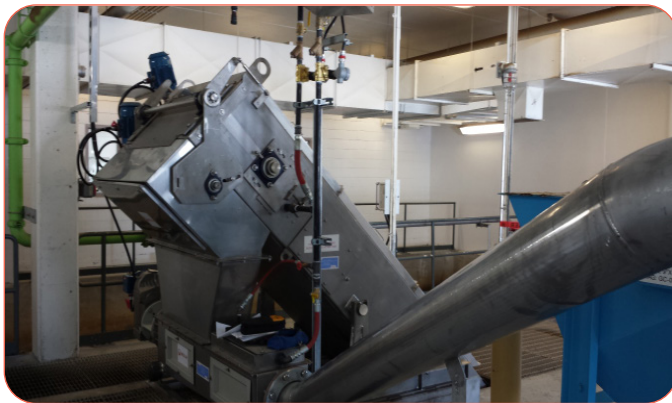
The equipment have been successfully commissioned in 2016.

# Battery Point, NS

## The Technologies

### John Meunier ESCALATOR® Fine Screen

- High screenings capture performance of 79% using travelling elements with 6 mm perforations
- Versatile for wastewater, stormwater and surface water applications
- Heavy duty, stainless steel construction
- Intermediate integral grid supports
- Industry leading tight-tolerance construction
- Positive sealing at foot via double full-width brushes and neoprene sealing flap
- Superior cleaning with combined spray wash and mechanical high-speed self-adjusting brush
- All maintenance from operating floor
- Available pivoting design



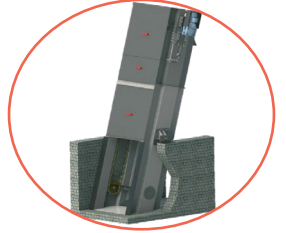
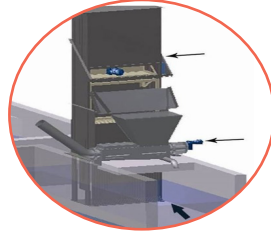
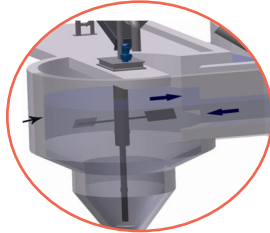
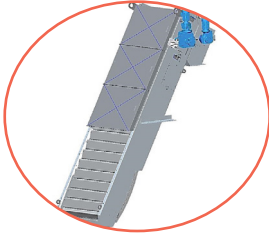
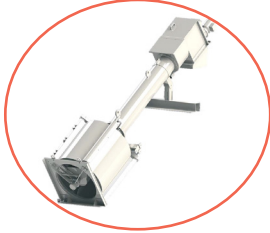
### John Meunier ROTOPAC® type RPW Screw Washer Compactor

- Screenings volume reduced up to 70%
- Dewatered screenings may attain up to 60% dryness
- Organics removal may attain up to 90%
- Minimizes handling and disposal cost
- Can be adapted to any type of screen
- Dewatered screenings suited for incineration
- Completely enclosed system
- Maximizes odor control
- Hygienic protection of operating personnel
- Simple, compact, fully tested and proven

*“The Veolia escalator screen and compactor have made a significant positive impact on the quality and efficiency of treatment at the Battery Point WWTP. In the few years we have had this equipment in operation, we have already seen approximately 10 times the amount of screened material used from our previous equipment as well as improved operation, reduced operator maintenance and increased longevity of other key process equipment located downstream of the screen”.*

- Brandon Talbot, Supervisor - Wastewater Operations, Cape Breton Regional Municipality

# The Complete John Meunier Headworks Set-up



## Coarse and Fine Screens, bar type

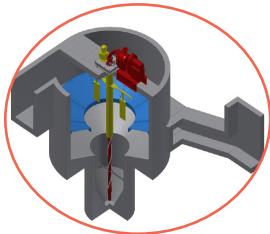
CONT-FLO® type CF Vertical Bar Screen  
CONT-FLO® type ER Multi-Rake Bar Screen

## Fine Screens, mobile screening plate type

ESCALATOR® Fine Screen  
ROTARC® type SD Rotary Drum Fine Screen

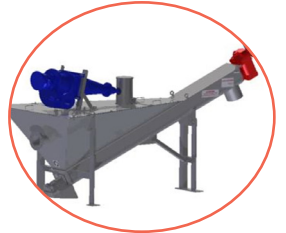
## Fine Screens, stationary screening plate type

ROTARC® type SB Shaftless Spiral Fine Screen



## Solids' Handling

ROTOPAC® type RPW Screw Washer Compactor  
ROTOPAC® type RCW Dual-Stage Screw Washer Compactor  
ROTOPAC® type RDW Shaftless Screw Compactor  
ROTOPAC® type RLK Screw Conveyor

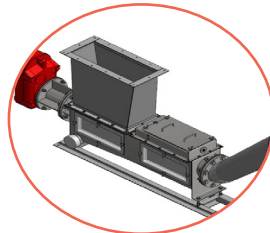


## Grit Removal Systems

MECTAN® Vortex Grit Removal System  
SAM® type GDS Grit Dewatering Screw  
SAM® type GFW Grit Washer

## Combined Systems

SEPRAPAC® type PCS Pretreatment Combined System  
SEPRAPAC® type SRS/SCS Septage Combined System



Veolia Water Technologies Canada is the final choice for the design, manufacture and servicing of wastewater pretreatment works. We target excellence and innovation. We also invest in R&D to meet growing environmental regulations and market needs.

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