Resourcing the world





Landfill Leachate Treatment

Treating leachates to protect the environment

Landfill leachate is a complex wastewater effluent with a high variability in its physical and chemical properties. Proper treatment of this type of water therefore requires significant attention.

Veolia's large portfolio of advanced technologies and services allow for successful and reliable treatment of this wastewater. We are experienced in designing systems that use both conventional and proprietary technologies to meet our clients' needs with cost-effective and sustainable solutions.



A wide range of proven solutions for a large variety of needs

1 Septic sludge treatment

• Septage receiving station and sludge dewatering (SEPRAPAC®)

Leachate biological treatment

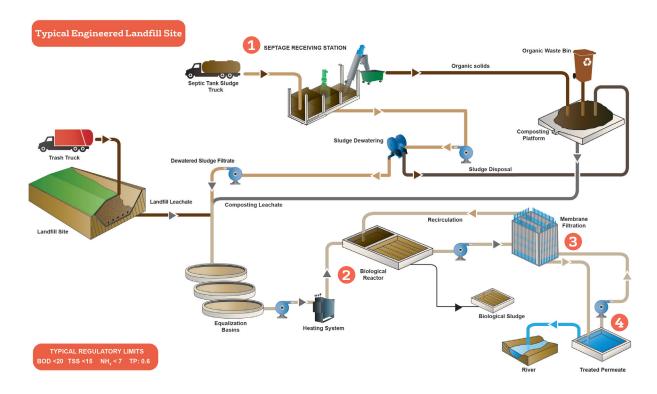
- Sequencing Batch Reactor (SBR) conventional process to remove the BODs
- Moving Bed Biofilm Reactor (MBBR) a support for nitrifying biomass (AnoxKaldnes™)
- Membrane Bio-Reactor (MBR) for high quality effluent suitable for reuse (BIOSEP™)

3 Clarification for TSS and metals removal

- High-Rate Dissolved Air Flotation is an efficient process for clarifying MBBR effluent (SPIDFLOW®)
- The Ultimate Clarifier for clarification and softening, with a footprint up to 20 times smaller than conventional systems (ACTIFLO®)

4 Polishing treatment

- Discfilters for tertiary TSS removal. (Hydrotech™)
- Phosphorus recovery (Struvia™)



Services to meet our clients' needs

- Digital solutions for remote monitoring and controlling of connected plants and water treatment equipment (AQUAVISTATM)
- Water characterizations, lab services, and piloting
- Mobile Water Units for temporary or emergency water needs
- Water treatment chemicals (Hydrex[™])

Veolia's experience in leachate treatment in Canada

LET Frampton, QC

Leachate treatment and compliance with provincial regulations for direct discharge (BOD, TSS, TAN)

Technologies: Moving Bed Biofilm Reactor (MBBR), Dissolved Air Flotation (DAF)

Flow: 200 m3/d



LET St-Rosaire, QC

Leachate landfill + composting + septic tank sludge treatment and compliance with provincial regulations for direct discharge (BOD, TSS, TN, Phosphorus)

Technologies: Septic tank sludge receiving station + dewatering + Membrane Biological Reactor (MBR)

Flow: 510 m3/d



LET Sainte-Sophie, QC

Leachate landfill treatment for water polishing (TSS and Zinc) before discharge in river

Technologies: Sequencing Batch Reactor (SBR) + Lamellar settling

clarifier

Flow: 1000 m³/d



LET Champlain, QC

Leachate treatment and compliance with provincial regulations for direct discharge (BOD, TAN)

Technologies: Moving Bed Biofilm

Reactor (MBBR) Flow: 614 m3/d



LET St-Nicéphore, QC

Leachate treatment and compliance with municipal regulations for network discharge (BOD, TKN)

Technologies: Sequencing Batch

Reactor (SBR) Flow: 645 m3/d



LET Coaticook, QC

Leachate treatment and compliance with provincial regulations for direct discharge (BOD, TAN, TSS)

Technologies: Moving Bed Biofilm Reactor (MBBR) + Gravity settling clarifier

Flow: 20 m3/d



COMOX, BC

Leachate treatment and compliance with strict regulation for infiltration (BOD, TSS, TAN, NO3, P)

Technologies: Membrane Biological Reactor (MBR)

Flow: 250 m3/d



Wildrose, AB

Filtrate treatment and compliance with municipal regulations for network discharge (BOD, TAN)

Technologies: Septic tank sludge receiving station + Dewatering sludge + Moving Bed Biofilm Reactor (MBBR) + Discfilter

Flow: 410 m3/d

