



EarthRes
ENGINEERING AND SCIENCE





*Leachate Treatment
Introduction to Services*

EarthRes Strengths

- Technical staff and management with diverse landfill and leachate treatment experience
- Centralized project team location
- Construction experience of design team means enhanced constructability, superior drawings and contract documents
- Outstanding process control capability and understanding of operational constraints

EarthRes Leachate Treatment Technology Services



Leachate Treatment Technology

Sequencing Batch Reactors



Leachate Treatment Technology

Membrane Bioreactor Projects (MBR)



Leachate Treatment Technology



Metals Removal Technologies

- Hydroxide Precipitation
- Reverse Osmosis
- Other

Key Targeted Metals

- Boron
- Arsenic
- Copper

Leachate Treatment Technologies

Color Removal Technologies

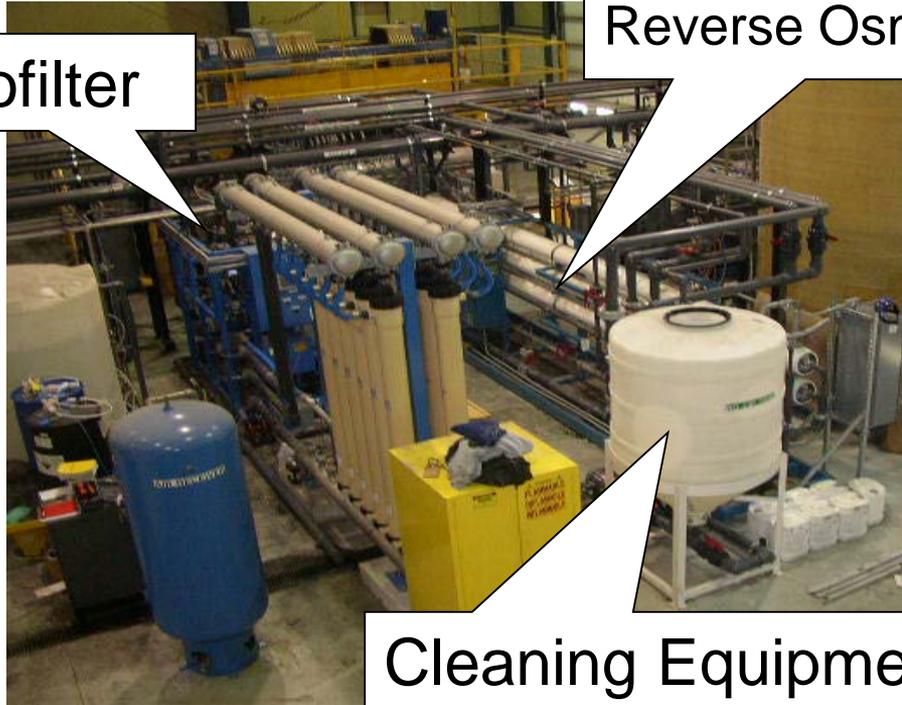
- Carbon Adsorption
- Oxidation
- Reverse Osmosis
- Chemical Precipitation



Membrane Systems

Microfilter

Reverse Osmosis



Cleaning Equipment

Proven Results



Problematic Parameters Successfully Treated

- Ammonia-nitrogen
- Total Nitrogen
- Color
- Metals (Arsenic, Boron)
- Odor
- Total Dissolved Solids
- COD and BOD

EarthRes Wastewater Permitting

- Stream discharge
- Pretreatment and POTW discharge
- Effluent reuse
- Effluent recirculation
- RO Concentrate recirculation
- Leachate recirculation

Summing Up EarthRes Qualifications

- Specialized expertise in waste management field
- Demonstrated record of performance at multiple landfill sites
- Proven strong capabilities with leachate treatment plant design, permitting, construction and O&M
- Extensive experience with a variety of regulatory agencies
- Significant experience with a variety of treatment technologies

Contacts

For further questions, information and discussion, please feel free to contact:

- Jan Hutwelker, PE (jhutwelker@earthres.com)
- Tom Pullar, PE (tpullar@earthres.com)
- Hong Sima, PhD, PE (hsima@earthres.com)
- Dave Horvath, PG (dhorvath@earthres.com)

EarthRes Group, Inc.

www.earthres.com

800-264-4553



Thank You