



Leachate Treatment Services

CEC's leachate and industrial wastewater engineers design systems to treat leachate and gas well condensate from extraction wells at landfills.

INVESTIGATION & TREATMENT TECHNOLOGIES

CEC's experience with designing, building, and operating treatment plants and in-depth knowledge of their complex processes and critical details provide the basis for the resultant impact on treatment solutions for new and retrofitted treatment facilities. Leachate treatment projects range from simple permitting to complex design engineering and can take the form of a CEC-led design/build approach.

MECHANICAL TREATMENT SYSTEMS

PHYSICAL/CHEMICAL TREATMENT

- Air Stripping
- Chemical Precipitation
- Chemical Oxidation
- Ion Exchange and EDR
- Reverse Osmosis and Membrane Systems
- Evaporation
- Deep Well Injection
- Zero Liquid Discharge

BIOLOGICAL TREATMENT

- Activated Sludge Continuous Flow Systems
- Anaerobic Treatment and Gas Utilization – Power Generation, Preparation to Pipeline Quality, and CNG Use
- Sequencing Batch Reactors (SBR)
- Membrane Biological Reactors (MBR)
- Fixed Film/Media Systems/Biotowers
- Aerated Lagoon
- Trickling Filter
- Moving Bed Bioreactor (MBBR)
- Fixed Film
- Immobilized Cell Bioreactor

PASSIVE TREATMENT SYSTEMS

- Lagoon
- Constructed Wetlands
- Vertical Biochemical Reactors

CONSTRUCTION/OPERATION/CONSULTATION

- Permitting
- Construction Observation and Commissioning
- Design/Build Services
- Operation and Maintenance Manual Preparation
- Sampling
- Process Operations Consulting
- Controls Improvements
- Management Assistance
- Contract Operations

