

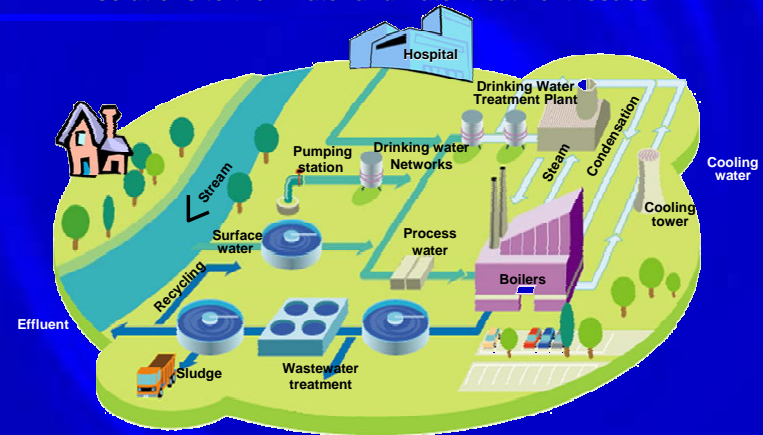


A.B.E. ENVIRONMENTAL TECHNOLOGIES

Water, Process and Wastewater Solutions

Filtration & Separation Specialists

A.B.E. Environmental Technologies Mission is to reduce our client's operating costs by increasing efficiencies and providing innovative solutions to their water and water treatment issues.



Realizing our mission statement

- To realize our mission statement, A.B.E. has formed strategic partnerships to ensure our clients receive the best possible technical advice and services.

Realizing our mission statement

Equipment

- A.B.E. produces and provides the highest quality systems at the most affordable cost. Our systems meet our most demanding customer equipment and process needs.
- To be competitive, A.B.E. designs and manufactures their own equipment. In addition, strategic vendor partnerships allow A.B.E. to be one of the lowest cost providers without sacrificing quality. Our systems typically cost 15 – 20% less to purchase than our competitors.
- By manufacturing our own equipment, costs are controlled, designs can be modified, quality is ensured and our deliveries are consistent.
- A.B.E. has manufacturing facilities, in both the U.S. and Canada

Service Capabilities

- Local service can be dispatched 24/7 – usually within 4 hours
- Toll free 24/7 technical and customer support groups
- Temporary and emergency systems are available

Other Services A.B.E. Provides

- Laboratory Services
- Process Design
- Engineering
- Project Management
- Equipment Manufacturing
- Construction
- Installation
- Validation
- Operation Services
- Preventive Maintenance
- Consulting

THE FILTRATION SPECTRUM

Microns	0.001	0.01	0.1	1.0	10	100	1000	
Angstrom	10	100	1000	10^4	10^5	10^6	10^7	
MOL. WEIGHT	100	200	5,000	20,000	100,000	500,000		
RELATIVE SIZE OF COMMON MATERIAL	Aqueous salts	Pyrogens	Carbon black	Virus	Paint pigment	Bacteria	Yeast cells	Beach sand
	Metal ions	Sugars	Colloidal silica	Albumin protein		Pollens		
					Milled flour			
FILTRATION TECHNOLOGY	Reverse Osmosis		Ultrafiltration			Microfiltration		Particle filtration

Reverse Osmosis

Removes

- ❑ Colloidal particles
- ❑ Organics
- ❑ Ions (TDS)
- ❑ Suspended solids
- ❑ BOD/COD

Maintenance

- ❑ Membranes need to be cleaned



■ Water-One

Asset Management

- Asset Management
 - A.B.E. owns and operates equipment
 - All maintenance and consumable costs are covered by A.B.E.
 - All component replacement costs are covered by A.B.E.

Water Management

- Water Management
 - A.B.E. Tests and adjust equipment to continuously meet water spec's
 - All operating parameters are checked against established operating requirements

Service Program Objectives

- Meet or exceed customer expectations for
 - Quality
 - Quantity
 - Safety
 - Other aspects of service provided
- Customer Involvement
- Communication
- Successful Partnership

Outsourcing Goals and Priorities

■ Goals

- Provide process and treated wastewater that meets specifications at all times without placing anyone in danger, without polluting the environment and at the lowest possible cost

■ Priorities

- Safety of all site personnel
- Preventing any chemical or hazardous materials from escaping primary containment and polluting the environment
- Operating and maintaining the systems in the most reliable manner
- Operating the systems at the lowest possible cost

Operations Program

■ Technician Training

- On-site technical training
- SOP training
- Service Technician Training
- Safety training
- Site Behavior
- Customer Required Training

■ SOP

■ PM

■ Site Interruption Prevention Plan (SIPP)

■ Failure Mode Effects Analysis (FMEA)



Operations Program

- Account Reviews
- Regional Review of System Data
- Daily Operations Log
- Safety and Environmental Logs

A.B.E. ENVIRONMENTAL TECHNOLOGIES

- Personnel
- Capabilities
- Resources
- Commitment
- Understands and appreciates the importance of PARTNERSHIPS

Some of Our Systems in Operation

A Range of Capabilities



