ADVANCED ODOR REMOVAL SYSTEMS

KCH Engineered Systems Forced Draft Aeration Towers and Degasification Systems are designed to meet the demands of municipal drinking water treatment plants. Our advanced system is capable of effectively stripping hydrogen sulfide (H₂S) odor from millions of gallons of water per day. KCH also designs and manufacturers Air Strippers to remove VOCs, THM, Carbon Dioxide, and other compounds from contaminated water.

APPLICATIONS
- Municipal Water Treatment Plants
- Industrial Wastewater Treatment
- Groundwater Remediation
- Leachate Treatment

BENEFITS
- Reduces Odors and Contaminants from Water
- NSF/ANSI-61-G Certified Materials of Construction for Drinking Water Systems
- Capacities to 7 MGD in a Single Tower
- Low Maintenance
- Designs to Remove H₂S, CO₂, THMs and VOCs
- POLYSTROONG® and POLYLAST® Material
  - Maximum Structural Integrity and Corrosion Protection
  - 100% UV Blockage Prevents Biological Growth Formation
- Scrubbing of Off-Gas Can Be Provided by KCH for Single Source Responsibility
PRODUCT INFORMATION

The KCH Engineered Systems Forced Draft Aeration Towers and Degasifier Systems are comprised of a vertical counter current tower filled with packing media, a field adjustable liquid distribution system, and other critical internals to allow for proper degasification. These systems are constructed of POLYLAST® or POLYSTRONG® material, providing structural integrity, UV protection, and corrosion resistance required for outdoor installations. These vessel materials are Certified to NSF/ANSI 61-G for health effects and lead content. All components within the Degasifier tower that come into contact with potable water are NSF/ANSI 61-G Drinking Water System Certified. When needed, KCH will design and manufacture vessels to handle up to 150 MPH wind loads.

The KCH Engineering Design team pays careful attention to critical factors that can greatly affect removal efficiencies of an Aerator or Degasifier. These factors can include water temperature fluctuations, alkalinity, total sulfide content, pH, and many others.

The Aeration and Degasifier Systems can include additional components needed to provide a complete functioning system such as:

- AMCA Rated Blowers
- Air Filters for Blowers
- Sound Enclosures for Blowers
- Instrumentation and Controls
- Differential Pressure Indication
- Access Manways
- OSHA Approved Ladders and Platforms
- Cleaning Systems
- Odor Control Systems for Off-Gas
- Startup and Training

HOW IT WORKS

Odorous or contaminated water enters the top of the tower and is uniformly distributed onto the packed bed section, which breaks the water into smaller droplets and increase the overall surface area. A KCH centrifugal blower introduces counter current air flow at the base of the column, where it travels vertically through the media to strip H₂S Gas from the drinking water. The H₂S laden air is likely then sent to a KCH Odor Control Bio-Scrubber or Chemical Scrubber. Packing depths are as required to meet the applications removal efficiency.