

# BIOKILL Wastewater Treatment Systems for Decontamination of Effluent Streams

BIOKILL Wastewater Treatment Systems



Dual Stage Steam Sterilization

© 2005  
BIOKILL SYSTEMS  
LLC

# The BIOKILL Wastewater Treatment Series of Effluent Decontamination Systems

# BIOKILL

The Bio-Kill Wastewater Treatment Systems are designed to decontaminate effluent waste streams containing microorganisms or proprietary cell structures in the Bio-Pharmaceutical market. Laboratories with a Bio Safety Level of 2, 3, or 4 [BSL-2, 3, or 4], will generally require a liquid waste decontamination system. A Bio-Kill system may be combined with a neutralization system if pH adjustment is required. The Burt Biopharm Bio-Kill line is the result of 35 years of experience in advanced modular design of skid-mounted equipment for high purity and chemical handling applications.

## Features

The Bio-Kill Series is engineered for exceptional performance

- ASME stainless steel pressure vessels
- Heavy duty polypropylene reaction tanks
- Proportional control metering pumps
- Analytical instrumentation with PLC based control
- Stainless steel and plastic piping systems
- Plate and frame heat exchangers
- Non-contact ultrasonic level sensors
- Monitoring and recording instrumentation
- Storage vessel with centrifugal transfer pumps

## System Descriptions

The Bio-Kill Series of effluent decontamination systems are available by use of thermal sterilization or chemical disinfection. Based on the characteristics of the effluent stream, the means of decontamination can be selected. Standard systems consist of a storage tank, transfer pump, and Bio-Kill reaction system. Fully automated dual stage systems are also available for operational redundancy.



## Versatility

The Bio-Kill Series family of Effluent Decontamination Systems is ideal for use in:

- Pharmaceutical Manufacturers
- Life Science Research Facilities
- Bio-Medical and Clinical Laboratories
- Food and Beverage Processing
- Hospitals and Institutions
- Education Facilities

## Thermal Sterilization Systems

These systems are powered using steam but electric or gas-fired units are available. The effluent is transferred into a heated, pressure vessel and maintained at the design temperature and time period, then cooled and discharged. Batch or continuous feed systems are available.

## Continuous Feed Systems

Available with steam sterilization. The effluent is pumped from a storage tank through a heat exchanger which serves a dual purpose, to preheat the effluent and cool the sterilized waste prior to discharge. A secondary heat exchanger delivers the waste stream to a retention coil where sterilization takes place.

## Chemical Disinfection Systems

The effluent waste stream is pumped into a plastic reaction tank where chemical disinfectant dosing is added and mixed by batch method. Residual chlorine analyzers monitor the reaction.

Please contact your local  
BPE Biopharm Engineer  
for more information  
about the BIOKill  
family of products:

Headquarters:  
1050 Sherman Ave  
PO Box 185100  
Hamden, CT 06514  
tel- 203.287.1985  
fax- 203.288.7354

New York:  
Burt Process Equipment  
598 Columbia Turnpike, Suite 2  
East Greenbush, N.Y. 12061  
tel- 518.477.5005  
fax- 518.477.5008

New England:  
404 Middlesex Rd  
Tyngsboro, MA 01879  
tel- 978.649.9660  
fax- 978.649.7430

Mid- Atlantic:  
1 Cornell Parkway  
Springfield, NJ 07081  
tel- 973.564.7700  
fax- 973.564.7704

e-mail- [info@burtprocess.com](mailto:info@burtprocess.com)

[www.burtbiopharm.com](http://www.burtbiopharm.com)  
[www.burtengineeredsystems.com](http://www.burtengineeredsystems.com)  
[www.pure-plus.com](http://www.pure-plus.com)

## Fluid Handling Equipment Since 1970

The information in this document is subject to change without notice. Burt Biopharm believes the information contained herein to be reliable, but makes no representations to its accuracy or completeness. Burt Process Equipment's sole and exclusive warranty is as stated in the Standard Terms and Conditions of Sale of these products. In no event is Burt Process / Burt Biopharm liable for any indirect or consequential damages relating to the use of these products.