



# Regulatory Considerations:

Eliminate your liability with the push of a button.

Processing and disposing of biomedical waste is highly regulated to ensure proper waste treatment and overall safety. Compliance with the multitude of federal, state and local regulatory requirements can be a daunting task. With the Demolizer® II system, regulatory compliance is just a button away.

## The Demolizer® II Solution

The Demolizer® II system offers a cost-effective, safe, simple and secure approach to compliant waste processing, documentation and disposal. The system converts both sharps and typical red bag waste<sup>1</sup> to non-biohazardous, non-infectious solid waste that can be disposed of as common trash.

The Demolizer® II system meets CDC and EPA recommendations for treatment and is consistent with the requirements under the OSHA Bloodborne Pathogen Rule. The Demolizer® II is approved or meets requirements for treatment in 47 states. Through proper use, a waste generator's cradle-to-grave responsibility is met, and liability is eliminated.

## Proven Optimal Performance

### Bacterial and Viral Efficacy

The Demolizer technology has been exhaustively tested at Kansas State University, Stanford University and private laboratories in support of state regulatory approvals. Minimum kill criteria of  $6 \log_{10}$  (99.9999%) was demonstrated using the following organisms:<sup>2</sup> *B. subtilis* (spores), *S. aureus*, Methicillin resistant *S. aureus*, *E. coli*, *P. aeruginosa*, *C. albicans*, *M. fortuitum*, *M. bovis*, *M. phlei*, and *Giardia* spp.

The inactivation of Duck Hepatitis B Virus as a viral indicator organism was demonstrated at a level of at least  $2.2 \times 10^5$  through efficacy trials conducted at Stanford University.

## Emissions Testing

Expanding air from the Demolizer® technology has been tested under challenge conditions using the EPA Test Protocol for Bacterial Emissions. Upon spiking the load with  $10^8$  cells of *G. stearothersophilus*, the emissions were tested to be bacteria-free. A dual filtration system has been incorporated to eliminate odors and to serve in a redundant safety capacity. Absence of bio-aerosols was verified by an independent evaluation at Valley Medical Laboratory (Springfield, MD).

Water condenses from the expanding air during processing and is collected in a jar at the side of the unit. This water was also tested under challenge conditions ( $10^8$  spores of *G. stearothersophilus*) by an independent laboratory and demonstrated to be bacteria-free.

## Heavy Metal Testing (Sharps)

An independent evaluation demonstrated that Demolizer® processed medical waste meets or exceeds U.S. EPA regulatory requirements regarding acceptable heavy metal levels.<sup>3</sup> Testing included eight heavy metals all of which tested well within regulatory limits, with six of the eight metals below the detection limit.

<sup>1</sup> The Demolizer® II System effectively treats sharps and blood saturated waste. It is not appropriate for the treatment of bulk liquids, pathological, radiological, pharmaceutical, hazardous or chemotherapeutic wastes.

<sup>2</sup> "Sterilization Efficacy of the Demolizer® II System for the on-site treatment of sharps and other regulated medical waste against *S. aureus*, *E. coli*, *C. albicans*, *M. phlei*, and *B. subtilis* spores", Kansas State University, July 2006.

Efficacy testing against *B. subtilis*, *S. aureus*, *C. albicans*, *M. fortuitum*, *M. bovis*, *P. aeruginosa*, and *Giardia*, Leberco Testing, Inc., multiple studies, 1992-1994. "Efficacy of the Demolizer system on Hepadna Virus (duck hepatitis B virus)", Stanford University, November 1992.

<sup>3</sup> Certificates of Analysis for Demolizer processed red bag and sharps waste, Leberco Testing, Inc., 1993. Heavy metals included: lead, mercury, arsenic, cadmium, barium and chromium.

