

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP#: 1018.2

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TITLE: Active-Closed Vaporized Hydrogen Peroxide Exposure for Ventilated Rack Systems, Air Handling Units and Hosing Components

SCOPE: Animal Care Personnel

RESPONSIBILITY: Facility Manager, Supervisor and Technical Staff

PURPOSE: To Outline the Proper Procedures for Routine Decontamination of Animal Housing Equipment and Associated Components.

I. PURPOSE

1. This SOP outlines the proper procedures to be followed for high level decontamination of animal facility housing rooms, individual ventilated cage (IVC) rack systems, air handling units (AHUs), and connecting hosing using vaporized hydrogen peroxide (VHP).

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager and/or Supervisor to ensure that all technical staff performing decontamination are adequately trained in the following: read and understand the information provided in the Bioquell Hydrogen Peroxide Sterilant SDS, mucous membranes. It is imperative that all personnel using HP wear the appropriate personal protection equipment in accordance with SOP #1016 and SOP #1162 Bioquell Z-2 Hydrogen Peroxide Vapor (VHP) Generator System.

5. If involving a WiFlow AHU connected to the Guardian System, note its housing room and IT jack location so that it will return to the same IT connection after VHP decontamination. If using an AHU without an available H₂O₂ cycle, leave the unit static and turned off.
6. Shut off HVAC to area to be decontaminated when possible. If HVAC cannot be shut off then all HVAC supplies, returns, dampers, and thimbles, where present, must be sealed to ensure no vapor leaves the area.
7. Remove the Temptrak sensor from the wall.
8. Remove any materials that may be incompatible with HP (e.g., open chemicals and medicines).
9. Remove the Interceptor filters from the Air Handling Units, bag them, label them according to rack number, and remove from the animal room.
10. Place the Z-2 generator in the center of most rooms for even VHP distribution. Other positioning may be required for alcoves or side rooms that are connected to the main room.
11. The Bioquell R-30 unit is used to aid in the distribution of VHP and for aeration of the room to remove VHP after decontamination.
 - a. When using the unit for aeration only, place unit so that air can flow, unimpeded into all six filters. Blocking filters will prolong the aeration process.
 - b. When using the unit to aid in VHP distribution, the front of the unit is positioned so that the fans are directed toward side rooms, alcoves or areas not in the line of sight of the VHP generator.
12. Changing stations, Class A2A laminar flow hoods, and equipment that recirculates air can be left "ON" during the cycle to obtain a more thorough decontamination of the equipment. However, if equipment contains internal filtration, aeration may need to be extended to counteract absorption into the filters.
13. Separate electrical circuits should be utilized for the Z2, R30, and other equipment (e.g., BSC) whenever possible.
14. Check the area for V o r n o t i f g i n o r n o

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Active Closed VHP Exposure for IVC systems
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VII. REFERENCES

1. SOP #016: Animal Room Preparation
2. SOP #1010: Microbiological Monitoring of Sanitation Procedures
3. SOP #1016: Hydrogen Peroxide Decontamination
4. SOP # 1127: Biological Safety Cabinets
5. SOP #1129: Nuair® Small Animal Changing Station
6. SOP# 1162: Bioquell Z-2 Hydrogen Peroxide Vapor Generator System
7. For additional information contact Bioquell Technical Support at (215) 682-0225 or review manuals located on Comparative Medicine Servers.

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