

Human Immunology Center Core Laboratory

David H. Smith Center for Vaccine Biology and Immunology

Aab Institute of Biomedical Sciences

**STANDARD OPERATING PROCEDURE: Operation and Maintenance of the Biological Safety Cabinet**

Date: 01/19/07

Author: Shelley Secor-Socha

Approval: Dr. Sally Quataert

**1. Purpose/Scope:**

The purpose of this procedure is to outline the operation and maintenance of the Biological Safety Cabinets located in the Human Immunology Core Laboratory (HIC).

**2. General Policy:**

The HIC will adhere to the specific guidelines recommended by The Baker Company for the use and maintenance of the biological safety cabinets. The specific policy will be outline below for use and care of the biological safety cabinets. This will also include the proper documentation indicating that the maintenance recommended has been completed and also tracking of any issues or problems with the biological safety cabinets on the maintenance log worksheet

**3. Specific Policy****3.1. Installation of the Biological Safety Cabinet (BSC)**

3.1.1. Reference the operation manual for the specific installation procedure of the BSC.

3.1.1.1. The BSC should be installed away from high traffic areas, doors, windows, and vents.

3.1.1.2. The cabinet should be installed at least 3 inches from the ceiling to allow for adequate airflow.

3.1.1.3. A representative from The Baker Company installed the BSC.

**3.2. Operation of the BSC**

3.2.1. Reference the BSC manual for operation

3.2.1.1. Record all relevant information on the current maintenance log worksheet located in the equipment log file.

3.2.1.2. Verify proper maintenance has been performed as documented on the maintenance log worksheet located in the equipment file or verify the date on the certification sticker on the front of the BSC

Human Immunology Center Core Laboratory

David H. Smith Center for Vaccine Biology and Immunology

Aab Institute of Biomedical Sciences

**STANDARD OPERATING PROCEDURE: Operation and Maintenance of the Biological Safety Cabinet**

- 3.2.1.3. Turn the hood on and allow the air to circulate for a minimum of 15 minutes to ensure a clean workspace. Verify the sash is open no more than 8 inches and that the air magnetic gauge is within the range specified on the BSC.
- 3.2.1.4. Spray and wipe down the inside of the hood with 70% EtOH before use.
- 3.2.1.5. Place all materials needed in the BSC at one time to minimize disruption of airflow. Items should be at least 4 inches behind the air grill.
- 3.2.1.6. Do not place any materials on the grill of the BSC. This will disrupt the airflow within the cabinet. Minimize the number of times entering and leaving the hood with your hands. Avoid the use of Bunsen burners within the hood. Dispose of all contaminated items in a waste container with disinfectant within the hood before removing for final disposal in appropriate biohazardous waste containers according to URMC policy.
- 3.2.1.7. When finished with the BSC, wait at least 5 minutes before disinfecting the hood. To disinfect, spray the inside of the cabinet with 0.8% Vesphene solution, wait ten minutes and wipe clean. Discard the toweling in the biohazard waste. Turn the unit off.

**3.2.2. Maintenance of the BSC****3.2.2.1. Every 6 Months**

- 3.2.2.1.1. Clean the inside of the BSC with 0.8% Vesphene solution including the area under the working surface, the sides, and back. Wait 10 minutes after applying the Vesphene solution before wiping clean. Do a final spray and wipe with 70% EtOH.

**3.2.2.2. Yearly**

- 3.2.2.2.1. Burgh/Schoenenberger or other authorized service company is contracted to certify, calibrate and maintain the BSC annually. Refer to the equipment maintenance log file for schedule and contact numbers. A certification sticker will be placed on the BSC documenting the service and expiration date.

**Reference:**

The Baker Company Operator's Manual

Human Immunology Center Core Laboratory  
David H. Smith Center for Vaccine Biology and Immunology  
Aab Institute of Biomedical Sciences

**STANDARD OPERATING PROCEDURE: Operation and Maintenance of the Biological Safety Cabinet**

Attachments:  
Maintenance Log Worksheet

**Revision History**

Version	Change	Impact	Justification	Change Date:
Legacy	No sign off	New/HIC startup		12/28/04
HIC-4-0006	New		Control document management system	01/11/07