Montgomery County Community College 340 DeKalb Pike Blue Bell, PA 19446 Document Number: UP 1 Revision Number: 0 Effective Date: 18JAN14

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SOP: Labconco Purifier Class 2 Biological Safety Cabinet (BSC) Operation

Approvals:

Preparer: Jason McMillan Date: 17JAN14
Reviewer: Dr. Margaret Bryans Date: 18JAN14

1. Purpose:

1.1. Operation of the Biological Safety Cabinet (BSC).

2. Scope:

2.1. Applies to the use of the BSC for maintaining a sterile environment for media preparation, culture inoculation and culture sampling.

3. Responsibilities:

- **3.1.** It is the responsibility of the course instructor/lab assistant to ensure that this SOP is performed as described and to update the procedure when necessary.
- **3.2.** It is the responsibility of the students/technicians to follow the SOP as described and to inform the instructor about any deviations or problems that may occur while performing the procedure.

4. References:

- **4.1.** Labconco Purifier Class 2 Biological Safety Cabinet Operator's Manual
- **5. Definitions:** N/A

6. Precautions:

6.1. UV Light is damaging to eyes and skin. Avoid exposure.

7. Materials:

- **7.1.** 70% Isopropanol (IPA) in spray bottle
- **7.2.** lab towels
- **7.3.** lab coat
- **7.4.** gloves

8. Procedure:

8.1. UV Decontamination – Performed for initial use of the day

- 8.1.1. Put on gloves and lab coat.
- 8.1.2. Open sash **slightly** and **immediately** turn on blower.
- 8.1.3. Spray and wipe down the stainless steel work surfaces of the BSC with 70% IPA.
- 8.1.4. With gloved hands, spray all necessary materials not affected by UV with 70% IPA and place in BSC.
- 8.1.5. Close the sash, turn off the blower, and turn on the UV light. This switch is located on the control panel. Refer to Figure 1.
- 8.1.6. Leave the UV light on for at least 15 minutes.
- 8.1.7. Place a biohazard waste receptacle adjacent to the cabinet.
- 8.1.8. Once the appropriate time has elapsed, turn off the UV light.
- 8.1.9. Turn on the visible light. This is located on the control panel.
- 8.1.10. Turn on the receptacle power.
- 8.1.11. Open the sash **slightly**, and **immediately** turn on the blower.
- 8.1.12. After blower is on, raise the sash to the safe operating level indicated by a red dot on the left side of the cabinet.

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Note: The alarm will sound if the sash is raised above this level.

8.2. Operation

- 8.2.1. Replace gloves with new ones.
- 8.2.2. Spray down hands with 70% IPA prior to entering the BSC.

 Note: Allow 30 seconds for the 70% IPA to dry. This ensures disinfection.
- 8.2.3. Spray all necessary equipment that needs to go into the BSC with 70% IPA, and allow to dry for 30 seconds.
- 8.2.4. Place all necessary equipment inside of the BSC.
- 8.2.5. Perform protocol while working in center of the work surface.

 Note: **Do not block the intake grills**. This ensures proper airflow. Refer to Figure 3.
- 8.2.6. Once the protocol is completed, remove all equipment from the BSC.
- 8.2.7. Place any disposable materials that have contacted any cellular organism into the biohazard waste receptacle.
- 8.2.8. Spray down the stainless steel work surfaces with 70% IPA. Allow 30 seconds for the IPA to dry, then wipe down stainless steel work surfaces with a lab towel. Spray down the work surfaces once more, but allow the IPA to dry without wiping.
- 8.2.9. Dispose lab towels used to clean BSC into the biohazard waste receptacle.
- 8.2.10. Turn off the BSC.

9. Attachments:

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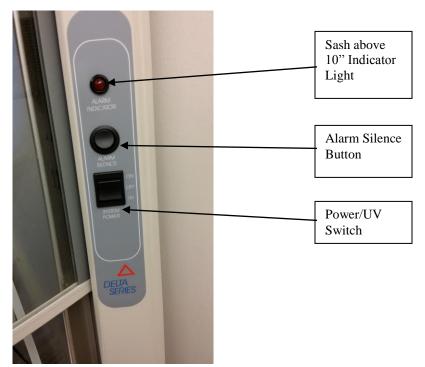


Figure 1: Biological Safety Cabinet Control Panel



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Figure 2: Biological Safety Cabinet Components



Figure 3: Air Flow Diagram

http://www.labconco.com/product/purifier-logic-class-ii-type-a2-biosafety-cabinets-2/4261

10. History:

Revision Number	Effective Date	Preparer	Description of Change
0	17JAN14	Jason McMillan	Initial release