

SOP #: 510.01Title: SOP - Working Safely in a Biological Safety Cabinet

Approvals:

Attending Veterinarian

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Date:

6/17/13

1. Purpose

1.1 The purpose of this Standard Operating Procedure (SOP) is to describe the safety practices and procedures for doing work inside a Class II Biological Safety Cabinet (BSC).

2. Responsibility

- 2.1 All ACF staff as well as FIU Faculty and Staff are responsible for following this SOP.
- 2.2 The Director of the Office of Laboratory Animal Research and facility supervisors must ensure compliance of this procedure and ensure staff is appropriately trained in the execution of this SOP.

3. Definitions

- 3.1 ACF - Animal Care Facility
- 3.2 BSC – Biological Safety Cabinet
- 3.3 PPE – Personal Protective Equipment

4. Guidelines

4.1 Reagents and Materials

- 4.1.1 OLAR Approved disinfectant.
- 4.1.2 Wiping cloths.
- 4.1.3 PPE

4.2 Equipment

4.2.1 Biological Safety Cabinet.

4.3 Procedures

4.3.1 BSC set up:

- 4.3.1.1 Raise protective glass screen, if applicable.
- 4.3.1.2 The blower must be activated prior to and during use.
- 4.3.1.3 Blower should be left on at all times, however if it is not on, press the blower switch on and let the BSC run for 15 minutes before using.
- 4.3.1.4 Turn on BSC's working lights.
- 4.3.1.5 Decontaminate the work surface before and after use by wiping work area with cloths (paper towels) soaked with approved disinfectant.
- 4.3.1.6 Allow a minimum of 3-minute contact time.
- 4.3.1.7 Place all materials within the BSC before starting work.
- 4.3.1.8 The BSC is now ready to use.

4.3.2 Shutting down the BSC:

- 4.3.2.1 Remove all supplies from BSC.
- 4.3.2.2 Remove large debris from work surface.
- 4.3.2.3 Wipe down all surfaces with a cloth soaked with approved disinfectant.
- 4.3.2.4 Allow to sit for 3 minutes.
- 4.3.2.5 Turn light off but leave the blower on. NOTE: BSC's should not be turned off. If found off follow BSC set up procedures above.

4.3.3 Work practices:

- 4.3.3.1 All work must be performed ensuring that vent grills are not obstructed to allow for proper air circulation and protection.
- 4.3.3.2 Workflow shall be conducted from "clean to contaminated" area.
- 4.3.3.3 Materials and supplies shall be used in such a way as to minimize the movement of "contaminated" items over "clean" areas.

- 4.3.3.4 All supplies needed for work session in BSC shall be placed in cabinet to minimize movement from outside to inside air barrier.
- 4.3.3.5 Gloved hands, sleeves and items placed in BSC shall be sprayed with approved disinfectant solution prior to entering BSC sterile work area.
- 4.3.3.6 Aspirators and suction flasks shall be connected to overflow containers containing enough disinfectant (100% bleach) to make the total volume of the flask a 1:10 ratio.
- 4.3.3.7 Aspirator/suction lines shall be connected to a HEPA filter.
- 4.3.3.8 Individual shall position oneself so that face is above airflow vent and parallel to front shield (i.e. in front of the sash and above the counter space).
- 4.3.3.9 Any item being removed from the BSC will be sprayed with OLAR-approved disinfectant and allowed to sit for 3 minutes before exit.

4.4 BSC certification

- 4.4.1 A licensed contractor certifies BSCs at least once every year.
- 4.4.2 BSCs receive a sticker at time of certifying, which include the date certified, and the date due for next certification.
- 4.4.3 BSCs are also re-certified if they are moved.
- 4.4.4 HEPA filters are checked, and changed as needed, at the annual certifications.
- 4.4.5 If a warning light signifies the HEPA filter is malfunctioning, the BSC will be taken out of service and the certification contractor will be called to make repairs.
 - 4.4.5.1 An "Out of Order" sign will be place on the BSC until contractor has repaired the unit.
 - 4.4.5.2 Sanitize and remove the BSC from the room if necessary.
 - 4.4.5.3 Replace the malfunctioning BSC with a functional unit if available.
- 4.4.6 Replacement units with current certification will be re-certified in place at the first available opportunity.
- 4.4.7 Even though they have been relocated, replacement units with current certification may be utilized in the interim.

5. References

- 5.1 UTSA SOPLARC022-00