**SOP**

**Operation and Maintenance of the Laminar Flow Hood**

**Version History**: This is version 1

**Purpose**

This SOP describes the procedure for regular operation and cleaning of the laminar flow hood.

**Scope**

This SOP is intended specifically for Good Laboratory Practice (GLP) guidelines, and is not targeted towards Good Manufacturing Practice (GMP) guidelines. It is meant to support other SOPs referencing work done in a laminar flow hood.

**Regulatory References** Not applicable

**Responsibility**

Responsibility of users: Follow standard operating procedure when using the laminar flow hood.

Responsibility of lab manager: Train new users on proper use of the autoclave; verify adherence to protocol. Arrange for yearly recertification of the hood. Replace HEPA filter annually.

**Definitions/Abbreviations** NA

**Related Documents** NA

**Required Equipment and Materials / Reagents**

* 70% ethanol (70% final concentration of 190 Proof Koptec ethanol or equivalent, in deionized water); dilute ethanol solution should be no more than 4 months old.
* Paper towels (any brand).
* Class H13 HEPA Filter (EN1822.1)

This SOP covers the use and cleaning of a Streamline Laboratory Products Laminar Flow Cabinet, Model No. SCV-4A2.

**Precautions**

This type of hood keeps samples clean but does not protect the user from exposure, and thus is meant for molecular biology work. Nothing infectious or potentially infectious may be used in the hood.

Users must wear a lab coat and gloves.

**Procedure**

Before using the hood:

1. Wipe surface with paper towel(s) soaked with 70% ethanol, allow to dry.
2. Turn on UV light. After 20 minutes, turn off UV.
3. Turn on hood light.
4. Partially remove cover, then turn on blower (this is to allow air to escape).
5. After blower is running (~10 seconds), fully remove cover and set aside.
6. Perform work, collecting waste in BL-2 biohazard waste bin.

After using the hood:

1. Discard any remaining generated waste in the biohazard waste bin (incinerated weekly).
2. Wipe surfaces and pipettes with paper towels soaked with 70% ethanol, allow to dry.
3. Partially replace cover, then turn off blower.
4. Adjust cover fully into place.
5. Turn off light.
6. Turn on UV light. After 5 minutes, turn off UV.

Maintenance activities:

1. MIT requires hoods to be re-certified by an outside company once per year. We use B&V testing, who will verify adequate face velocity through the entire work surface.
2. This hood is equipped with a Class H13 HEPA Filter (EN1822.1). It needs to be replaced once per year, and should be done at the time of re-certification for continuity.

**Worksheets** NA

**Appendix** NA