**Maintenance of Ductless Fume-Hood (AirScience Purair p5-36)**

Standard Operating Procedure

Lab: 206J - Lambros

Department: Aerospace Engineering

PI/Manager of Space: Prof. John Lambros

Written By: Renato Vieira

**Section 1: Overview**

Type of SOP: [x]  [ ]  Process [ ] Hazardous Material [ ] Hazardous Class of Materials [x] Equipment

Synopsis:

*This SOP describes the proper operation and maintenance procedures for the Ductless Fume-Hood (Air Science Purair p5-36) located at room 206J.*

**Section 2: Risk Assessment Summary (Hazards and control measures)**

*Information obtained from performing a risk assessment should be entered into this section.*

Equipment Hazards:

Equipment is considered low hazard. Do not use chemicals with boiling temperature below 60 degrees.

Hazardous Conditions:

Always verify the airflow of the Fume-Hood prior to opening any chemical containers (change pre-filter in case of clogging). Never stick your head inside the Fume-Hood. In case you smell something different, stop the procedure immediately, sealing chemicals in proper containers.

Personal Protective Equipment

The following are in addition to proper dress for work in a laboratory:

- Nitrile disposable gloves

Engineering Controls

- Change Pre-Filters every 2-3 months.

- Change Main-Filters every 12 months.

- Average

**Section 3: Procedures (Changing Filters)**

1. Wear PPE equipment (glasses and gloves) prior to starting.
2. Make sure the Fume-Hood is turned off.
3. Open the maintenance door using the key stored in the drawer underneath the Fume-Hood.
4. Take the old Main Filter off and store it in a sealed plastic bag (the same it came in).
5. Take the old Pre-Filter off and discard it in the special contaminated trash container.
6. Place the new Pre-Filter in place, making sure it covers the entire span of the air flow opening.
7. Put the new Main Filter in place making sure the label is upwards and facing the inspection window (check if it is the right type of filter for the chemical that will be used).
8. Write the date in the label.
9. Close the maintenance door.

**Section 4: Waste Disposal/Cleanup**

1. Used Pre-Filters need to be throw out in the special contaminated trash container.
2. Old Main-Filters need to be stored in sealed plastic bags.
3. Contact DRS for pick-up of contaminated trash.
4. Contact DRS for pick-up of old Main-Filters or use AirScience services (See references).

**Section 5: Additional Information**

Checklist:

[ ] Completed Lab Safety Training (General, Chemical Handling)

[ ] Additional gloves and masks are available in case those being used become contaminated.

References:

*AirScience Brochure:* [*http://www.airscience.com/lib/sitefiles/pdf/SalesLit/Purair-Basic-Ductless-Fume-Hoods.pdf*](http://www.airscience.com/lib/sitefiles/pdf/SalesLit/Purair-Basic-Ductless-Fume-Hoods.pdf)

*Purchasing new Filters:* [*http://filtcofilters.com/purair-36br-span-classmodeldescbasic-ductless-fume-hoods-36span-c-32\_113.html*](http://filtcofilters.com/purair-36br-span-classmodeldescbasic-ductless-fume-hoods-36span-c-32_113.html)

**Training Documentation**

Signing this document means that you have read and understand all aspects of this Standard Operating Procedure.

The supervisor is the person that acknowledges you took the training and understand the procedure. They can be a lab manager or researcher assigned by the PI to oversee this particular SOP.

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| **Name (Printed)** | **Name (Signed)** | **Supervisor** | **Date** |
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