

Brookhaven National Laboratory/National Synchrotron Light Source			
<b>Subject:</b>	<b>Operation of Nano-material Hood in Room 1-128</b>		
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## 1. Purpose

The purpose of this procedure is to provide guidance on the use of the HEPA filtered laboratory bench top hoods for nanomaterial use in the National Synchrotron Light Source. The SBMS Interim Procedure on Nanomaterial ES&H requires work that could generate dispersible nanoparticles be conducted in a HEPA filtered enclosure that operates at a negative pressure differential compared to the worker's breathing zone. This hood is configured to comply with SBMS requirements.

## 2. Scope

This procedure applies to the HEPA filtered hood for nanomaterial use installed in lab 1-128 in building 725.

## 3. Procedures

A) Before working in the HEPA filtered hood the user is responsible to ensure:

- i. The airflow sensor is operational (green light is on). The airflow alarm is an audible and visual alarm to indicate adequate airflow to ensure worker safety. Air flow can be visually verified by position of "streamer" affixed to hood face.
- ii. The large non-HEPA filtered exhaust hood fan is on and operating. Air flow can be visually verified by position of "streamer" affixed to hood face.
- iii. The HEPA filtered hood enclosure is lowered. To open hood enclosure see procedure "B" below.
- iv. If the airflow alarm sounds or one of the exhaust fans fail:
  1. Secure free nanomaterials (close containers).
  2. Call lab steward.
  3. Stop operations until alarm is resolved.
  4. Contact the operations group at pager 5824 or extension 5046 to silence alarm and temporarily place hood out of service. Only the Operations Group or Lab Steward can silence the alarm and tag hood enclosure "out of service."
- v. Lab Steward or Operations Group can return hood to service after alarm condition has been satisfied.

B) Procedure for opening the hood enclosure:

- i. Close all samples in the hood.
- ii. Wipe interior surfaces of hood with damp wipes.
- iii. Only open hood momentarily to load or unload equipment.
- iv. Hood enclosure cannot be left unattended while it is open.

Document Review Frequency	
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