

Safetygram

NCI Frederick

ISM-207

General

February 2013

Protection of House Vacuum System

FNLCR Environmental, Health and Safety Operations and Compliance Manual (of Section C-13 – Lab Ventilation Management Program) states to prevent contamination to house vacuum systems with the materials used in the Biological Safety Cabinet (BSC), Chemical Fume Hood (CFH) or on the benchtop, a filter must be placed on the vacuum line immediately before the valve. In most Biological Safety Cabinets (BSC's), this will be between the last aspirator flask and the valve. This is to protect Facilities Maintenance Engineering (FME) staff in the event it became necessary to service, replace or otherwise handle vacuum valve or vacuum line and piping when providing maintenance services, replacement or general handling following contamination of the valve or line.

Vacuum systems shall be protected with appropriate filtration (0.3 micron hydrophobic filter or the equivalent) to minimize the potential for contamination of vacuum pumps.

Filters shall be located as close as possible to the valve (petcock) in order to minimize the potential contamination of vacuum lines and to preclude and minimize decontamination and decommissioning costs.

Filter housings shall be designed for easy filter replacement in order to minimize the possibility of maintenance worker contamination and to provide for easy disposal.

For use of vacuum systems in a BSC, refer to Safety Gram 144.

An example of an acceptable filter available in the warehouse:

Replacement cartridge filter (Gelman vacushield Stock #66401215)

