

SAFETY BULLETIN

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November 2, 2005

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Vacuum Lines

Each laboratory is supplied with a house vacuum line connected to a large pump in the basement of the building. When using a vacuum source, it is important and good practice to place a trap between the experimental apparatus and the vacuum source. This will protect the line from any possibility of liquids, radioactivity, or other material, getting into the line.

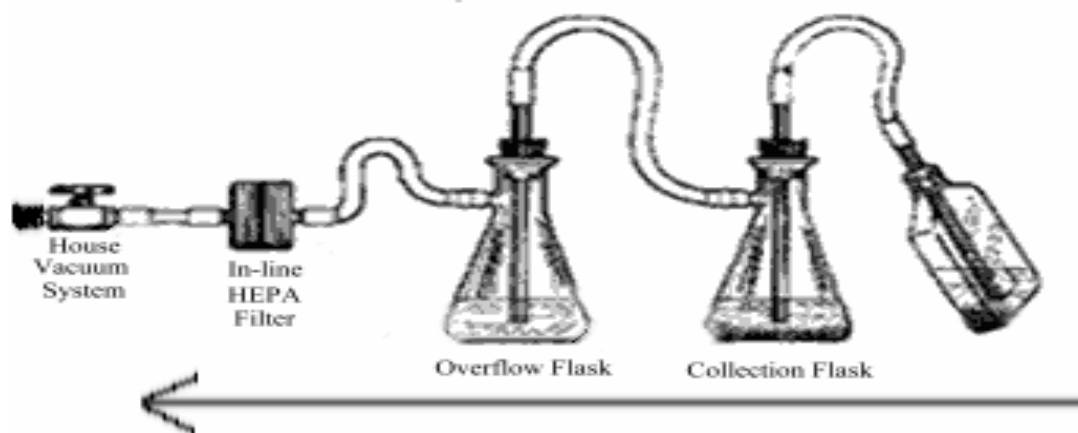
The vacuum trap:

1. protects the pump and the piping from the potentially-damaging effects of experimental material.
2. protects the workmen who service the vacuum pump apparatus in the basement.
3. prevents vapors and related odors from being emitted back into the laboratory or system exhaust.

The following recommendations should be taken into consideration when using the vacuum lines:

- No liquids should be aspirated directly into the house vacuum lines. There is a potential of a reaction within the lines if laboratory personnel from different laboratories aspirate incompatible chemicals through the vacuum lines.
- Vacuum lines are **not exhausts** and should not be used in this manner.
- Blockage may result when vacuum lines are used improperly.
- Vacuum lines not in use should be turned off.
- When collecting ethanol or other hazardous chemical, remember to dispose of them via EH&S.

In order to avoid blockage and escape of liquids into the vacuum lines a vacuum trap should be set up. In designing such a system, see the image below :



The filter should be replaced whenever there is evidence of filter failure or blockage, and, on a routine basis (no less often than annually). Filtering devices are available commercially via Fisher (Whatman Vacu-Gard™).

If you have any questions, please call Environmental Safety and Health at X3560.