

SAFETY BULLETIN

DEPARTMENT of ENVIRONMENTAL HEALTH and SAFETY
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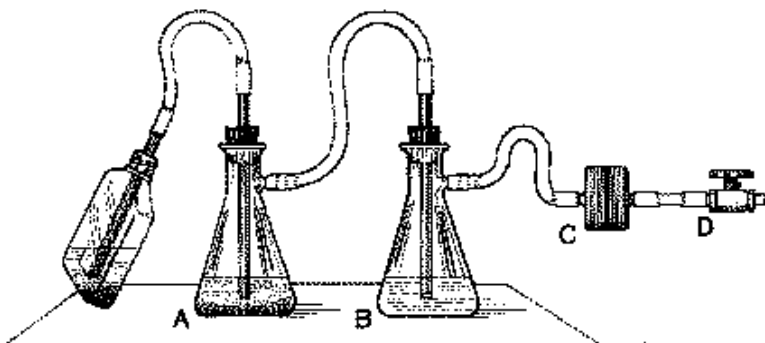
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PROTECTION OF VACUUM LINES FROM BIOHAZARDOUS MATERIAL

Whenever house vacuum or portable vacuum pumps are used with an infectious agent or human-sourced material, the vacuum line must be protected with a disinfectant trap and in-line filter. The configuration will include, working out from the vacuum nozzle, an in-line filter, a disinfectant trap and a collection flask.

If the collected material is to be discarded, the collection vessel (A) should contain the required amount of disinfectant. This is sufficient volume to achieve a final concentration (if the vessel were full) of 10% bleach. Waste treatment time prior to sewerage for liquid waste is a minimum of 15 minutes. If the collected material is to be preserved, the collection vessel (A) should be empty, but watched closely so that the vessel does not spill over into the disinfectant trap (B).



The disinfectant trap (B) should be an Erlenmeyer flask with a stopper with plastic tubing extending approximately halfway into the disinfectant solution. A 1-3 L Erlenmeyer flask filled approximately 1/10 - 1/4 full with disinfectant is recommended. Flasks should be plastic, plastic-coated glass or glass covered with safety netting or tape.

The disinfectant solution should be changed at least weekly or whenever the liquid level in the flask approaches the side-arm. If the solution evaporates to below the level of the tubing or becomes contaminated by an overflow of waste, it must be changed at once.

The final in-line filter (C) should be a high efficiency particulate air (HEPA) filter or a filter of equivalent or superior efficiency suitable for use in vacuum lines (e.g., Pall Vacushield™ Vent Device). The filter should be changed every six months or sooner if there is any indication of back-up or overflow.

Drawing:

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