Bunsen Burner Safety

Bunsen burners are found in many laboratories across campus. Because they produce an open flame, they can easily cause a lab fire or burn injury. The use of open flame burners in biosafety cabinets is not recommended due to the disruption of laminar flow. Whenever it is practical, The Department of Occupational Health and Safety (OH&S) recommends that another heat source be substituted. Heating blocks or mantles, glass beads and ceramic tube sterilizers (Bacti Cinerator) can usually be used instead of Bunsen burners.

Procedure for using a Bunsen burner:
• Place the burner at least 12 inches (30 cm) away from any overhead shelving, equipment or light fixtures.
• Remove all combustible materials and chemicals from the area.
• Tie back long hair and loose clothing, pay particular attention if you are wearing disposable lab coats or gowns, most are not flame resistant.
• Inspect burner hose for cracks, holes, pinch points or other defects and ensure that the hose fits securely on the gas valve and the burner.
• Replace any damaged hoses before using.
• Notify others in the laboratory that the burner will be in use.
• Have a sparker/lighter available before turning on the gas.
• Never use a match to ignite a burner. Use a sparker/lighter with extended nozzle instead.
• Adjust the flame to a medium blue by turning the collar to regulate airflow.
• Do not leave open flames unattended. Never leave the laboratory while the burner is on.
• Shut off the gas when burner use is complete.
• Allow the burner to cool before handling.
• Ensure that the main gas valve is off before leaving the laboratory.
• Immediately report gas leaks to your supervisor or to OH&S 4-2487