

## *STANDARD OPERATING PROCEDURE*

### **Bunsen and Ethanol Burners**

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2030 SRTC, 5-4403

Jan. 11, 2019

**Minimum Personal Protective Equipment Required:** eye protection, skin and body protection (long pants, lab coat, and closed toed shoes)

**Risks:** Burns and Fire hazard

**Special Handling:**

- ✓ Never leave a burner unattended
- ✓ Always extinguish the burner if you need to leave the room
- ✓ Keep hair, dangling jewelry, or loose clothing tied back and away from flame
- ✓ Never use a burner in a biological safety cabinet
- ✓ Alert lab manager or building staff immediately if you detect a gas leak

**Protocol/Procedure:**

1. Make sure the Bunsen or ethanol burner is away from any overhead shelving, equipment, or light fixtures.
2. Clear all papers, notebooks, combustible materials and excess chemicals from the area.
3. Inspect burner apparatus
  - a. Bunsen burner: Make sure hose is not cracked or pinched and that the hose is secure on the gas valve and the Bunsen burner. Replace any damaged hose.
  - b. Ethanol burner: Make sure there is ethanol in the burner, the lid is on securely, and there is sufficient wick.
4. Turn the gas on if using a Bunsen burner
5. Use a sparkler to ignite the burner
6. Adjust the flame by turning the collar to regulate air flow or adjust the wick height
7. Never leave open flames unattended or leave the laboratory while burner is on.
8. Shut-off gas or extinguish ethanol burner when work is complete.
9. Allow the burner to cool before handling.

**In Case of Fire:**

- For small fires, attempt to extinguish fire if you been trained in fire extinguisher use.
- For large fires, activate the fire alarm, evacuate the building and alert authorities.