

Safety Q and A: You have questions? We have answers!

The STAO Safety Committee

The STAO Safety Committee welcomes enquiries, with respect to safety issues, from STAO members. Please send your questions to the Safety Committee Chair (ralph_chou@stao.org). Your questions and the STAO Safety Committee responses may be published in *Crucible*, particularly if the information is deemed of general interest to other STAO members. Anonymity will be guaranteed.

QUESTION# 39: *Bunsen burners are used extensively as a heat source in school laboratories. The Fire Code (Section 2.4.4.4) states that:*

'Devices having open flames shall be securely supported in incombustible holders and located or protected so as to prevent accidental contact of the flame with combustible material.'

Does this mean that Bunsen burners should be secured by means of clamps and/or other types of holders during use? This is not a universally recognized common practice, particularly since quick temporary removal of the heat source may sometimes be necessary to avoid an accident.

RESPONSE: The STAO Safety Committee solicited the following response from the Office of the Ontario Fire Marshal (September 29, 2005):

"Closely examined, Article 2.4.4.4. states that devices: having open flames shall be securely supported in non-combustible holders and shall be located/protected to prevent accidental contact of the flame with combustible materials.

In the case of Bunsen burners, a non-combustible holder supports the flame. The design of the holders is intended to prevent accidental tipping. If your association is aware of students intentionally misusing science equipment, clamping of the burners is one option.

To prevent accidental contact with flame, science room procedures should include removing all combustible materials not associated with the experiment from the lab desk."

Note: Teachers are reminded to always be careful in purchasing the correct tubing for use with Bunsen burners. This was addressed in the November 2006 issue of *Crucible* (Question # 36).

