This is to notify the research community that OSEH actively discourages the installation of natural gas plumbing and use of conventional Bunsen Burners in Class II Biological Safety Cabinets (BSC). These units are used for microbiological containment and/or aseptic work with tissue cultures. The continuous operation of traditional gas burners in BSC’s creates thermodynamic instabilities that interfere with the function of the unit, reducing its ability to provide the sterile field necessary to protect the vulnerable research materials within. On our campus, fires within BSC’s have been associated with such use of gas burners. Flame sterilization of metal inoculation loops and other traditionally reusable materials is no longer necessary.

- The predominance of disposable loops, pipettes, and other transfer supplies has enhanced the ability of researchers to perform the repetitive inoculation tasks of microbiology and tissue culture maintenance:

  Fisherbrand® Disposable Inoculating Loops
  Cat. No. 14-375-101, $48.97 pk. (960)

- If metal loops are a must for your inoculations, infrared heat sterilizers are available to get the job done without flame or a great deal of BTU’s.

  Bacti-Cinerator IV Sterilizer (Available from Fisher Scientific)
  Cat. No. 02-544-157, $225.18 ea.
  [https://www1.fishersci.com/Coupon?cid=1333&gid=2912856](https://www1.fishersci.com/Coupon?cid=1333&gid=2912856)

- If you feel that flaming metal inoculation loops is your best traditional solution, use a proximity sensor or foot-pedal activated burner that only operates for the few seconds it takes to sterilize a loop.

  Fireboy Eco Safety Burner (Available from Fisher Scientific)
  Cat. No. 03-391-174, $448.64 ea.

Contact OSEH at 763-6973 with any questions you may have about use of open flame in research laboratories or use of Class II Biological Safety Cabinets. Also, Fisher Safety Specialist Katie McMullen is available for consultation at (C) 248-875-2453 or via email at Katie.McMullen@FisherSci.com