Safety Alert July 2021

Biosafety Cabinets: periodically check seals, fasteners and plugs

A Biosafety Cabinet Class 2 (BSCII) was found to be leaking air from around the front sash.

Background
Following the repair of a BSCII, it was smoke tested by the repairer and smoke was clearly visible escaping from the space between the hinged sash housing and the body of the front of the cabinet. The cabinet had passed the annual test several months earlier but could have been leaking potentially contaminated air for some time, without the user realising.

Cause of Incident
An important seal was found to be perished beyond any ability to stop air escaping from the cabinet (see Photo 1). This seal is fitted around the perimeter of the closed housing of the fixed-height sash and is visible when the hinged sash assembly is opened for cleaning or repairs. Like all seals, they will perish over time and should be replaced, particularly when they form part of the safety features of the equipment.

Photo 1: Arrows show the location of air leaks
Photo 2: Arrows show the location of the seal
What was done well

- The repairer alerted the Lab Manager
- The cabinet was immediately taken out of service
- The cabinet had been used more as a clean space to protect the work rather than protection for the users.

Recommendations for local Areas

- Users should give a general inspection of the cabinet before use.
- Those doing routine cleaning of the cabinets should check moving parts and seals.
- If the cabinet is within service date and you have concerns about its performance, tell the Lab Manager & consider a retest or bringing forward the next scheduled test.
- If you come across an issue, check other cabinets of similar make, model, age as these may also be showing similar problems.
- If you are not confident that the testing company is delivering the required standard of testing and maintenance, escalate your concerns to the Lab Manager and to the testing agent.

See also HS328 BSC Guide

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