Revised lab safety guide

Safeguards in the School Laboratory, 11th Edition (2006), ASE, ISBN 0 86357 408 4

A new edition, the eleventh, of this hugely important little guide 'Safequards in the School Laboratory' (affectionately known as Safeguards) was published at the beginning of 2006 by the Association for Science Education (ASE). Its importance comes from the many jobs it does so well - an introduction to safety for the new teacher; a primer for the experienced hand; a daily reference for all. Its scope covers the school subject areas of biology, chemistry and physics. It also includes general matters like insurance, training, legislation, management, good practice, fire precautions, storage and first aid.

Need a set of laboratory rules? Here is one place that you will find them. What should staff do while waiting for a first-aider? The advice is provided. What preparations should be made to deal with spillages? Turn to 15.9. All of this advice can be found on SSERC's SafetyNet CD (free copy to each school in membership of SSERC), although some may find this alternative source of information to be handy.

On every page is sound advice, for topics ranging from the commonplace to the peculiar. Every science department should have a copy; every science teacher should be dipping into it every other week. Non-chemists should read the chemistry bits. Indeed everyone should read those parts that lie outwith their own subject specialism.

Safeguards takes its name from the Safeguards in Science Committee. an ASE service group. SSERC was represented on the task group that revised Safeguards. However, some may feel that Safeguards does not fully represent the best advice from SSERC on every matter. It is, after all, a document which aims to serve the UK. The way that the differences between Scottish and non-Scottish affairs is handled in this publication is quite fair. For instance we differ from ASE over voltage limits, on which we take the view that limits should tally with expert advice. The outcome is a compromise reflecting the judgement of the Committee.



In spite of a few differences, we are pleased to endorse Safeguards as the best little guide to lab safety available.

So what's different from the Tenth Edition? Concerned that many teachers

have become too safety-conscious, often to the extent that safety has become an impediment to practical work, the ASE would like to convey a toned-down message. Safety measures are needed for moral,

ethical and legal reasons; but should not generally prevent pupils from doing experiments, or teachers from demonstrating more spectacular versions. Therefore the text has been recast to give as much encouragement as it can to lab work.

Then there are many detailed improvements. The law as it applies to school science is better understood. Although accidents and incidents are uncommon in any school, when they do happen, the results of what occurred, what the causes were, and how the events were handled, presents us with many lessons. The Safeguards' Committee has had another decade's set of events to learn from. So although much of the original text remains, there are many changes, mostly small, but expressing the collective wisdom of the writing team.

Companion publications

Despite having 142 pages, Safeguards calls itself a booklet, signalling to readers that its scope is limited to the bare essentials. It has many references to other sources of information, including ASE and SSERC publications. One companion ASE publication, now in its third edition, dated 2001, is Topics in Safety, about twice as large as Safeguards and more scholarly in tone. Another

companion, newly revised, is Safety Reprints, a collection of safety articles and notes from School Science Review and Education in Science. This 200 page A4-sized document is well indexed, with its assortment of articles grouped into eight categories.

Safety Reprints is a most useful compilation of accidents and incidents that have occurred in the last thirty years. Many of the articles are quite punchy, particularly the one on mercury thermometers. To counter the myth of a ban, evidence and calculations are presented which leads to the conclusion, "if a thousand

thermometers had been broken in the laboratory and no steps at all taken to clear them up or prevent evaporation, then there could be a problem". Enough said.

Safeguards in the School Laboratory and Topics in Safety are available for sale to SSERC Members at £12 and £17.50 respectively, inclusive of postage. Safety Reprints is

available through ASE Booksales.

Publications

Safeguards in the School Laboratory, 11th Edition (2006), ASE, ISBN 0 86357 408 4 (£12)

Topics in Safety, 3rd Edition (2001), ASE, ISBN 0 86357 316 9 (£17.50)

Safety Reprints, 2005 Edition (2006), ASE, ISBN 0863574092

SafetyNet CD, 2006 Edition, SSERC - due for publication in the near future. Free copy to each school, currently in membership of SSERC.

