

The Water Regulatory Advisory Scheme (WRAS), which is the UK water industry's approval scheme, has recently issued further comments on laboratory taps.

The issue, for those who have missed previous debate, is concern over the potential for backflow into these taps, leading to contamination of the water supply.

The design of laboratory taps in general is fine, as the gap between the tap and the sink is above the minimum distance required to prevent backflow (300 mm). The problem comes with the fairly commonplace practice of having hoses attached to the taps, which can be constricted, or in some other way compromise backflow prevention.

Scottish Water companies are now advised to "require alternative means of backflow prevention at the point of use in premises", where concerns are identified.

If the taps in your labs are fed from a header tank or you have a new lab with compliant backflow prevention installed (check with your Local Authority/Management Company to be sure) then you do not have a problem.

If your labs do **not** meet the criteria outlined above, i.e. do not have backflow prevention that complies with current regulations, SSERC has the following advice:-

- Make sure that any hose outlet is **above** the level of the overflow in the sink (Figure 1). Only attach hoses to the taps when specifically required and remove them at the end of the activity (Figure 2).
- Make sure that devices such as water driven filter pumps are not left permanently attached to taps – disconnect them immediately after use.
- The same applies to the hoses from water cooled condensers. The hoses from these are often long and lie in the sink – it would be a good idea to have them as short as possible so they will still drain without being dragged out of the sink but will still be above the level of any standing water. In any case, they should be disconnected after use.
- If you have a still connected to a laboratory tap, fix the outlet pipe in such a way that it cannot dangle in the sink.
 - A good fix for this would be to use a short length of copper pipe (or something similar) fixed to the worktop, using pipe clips, so that its end overhangs the sink. You can then connect the outlet from the still to this pipe ensuring that there is never any risk of backflow through the still.

We hope this is the last on the topic; for a while at least.

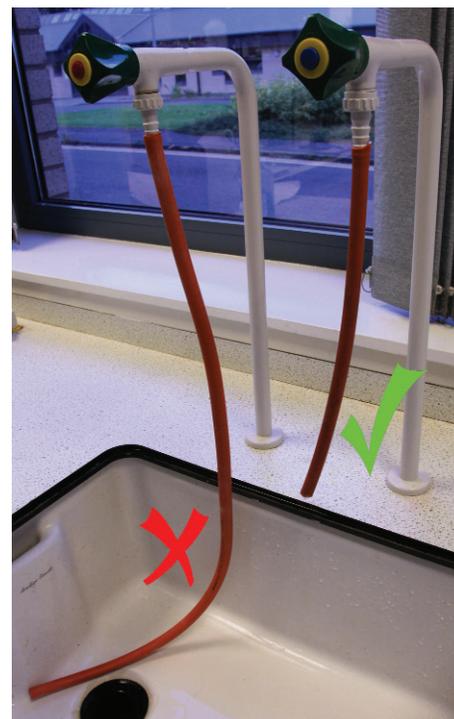


Figure 1 - If in use, the hose outlet should be above the sink overflow level.

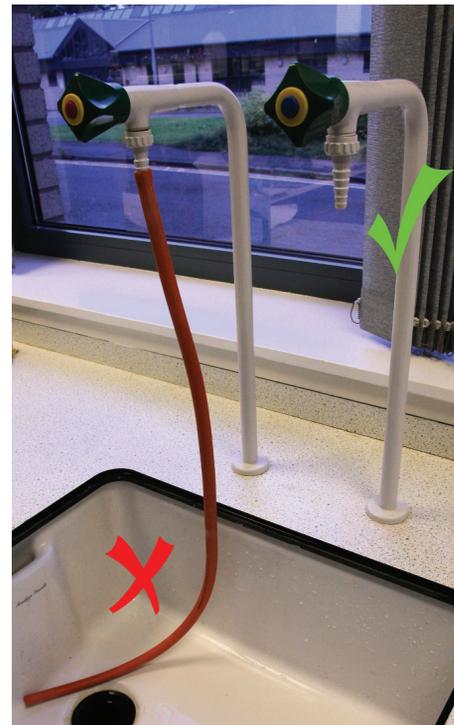


Figure 2 - Only attach hoses when required and remove them at the end of the activity.