

# Solving the Problem of Urinal Odours

The causes of odours are usually easy to rectify, but can take some time to identify. The first step should be to find the source of the odour and make sure it really is related to the urinals in the washroom that has the odour problem. In large buildings with voids connecting several floors, odours generated behind the panels in one washroom may only become apparent on another floor. Gentworks engineers have spent up to 5 hours tracing an odour problem to its true source, although this is a very rare occurrence.

## **1 Poor Cleaning**

The key reason that most urinals are not smelly is that the cleaners are using appropriate cleaning chemicals and doing their job properly. Key signs of inadequate cleaning are brown staining underneath the urinal bowl, especially around the traps, and stains on the surrounds at the back of and underneath the urinals. Some chaps are not very good shots. It would be best to use a microbiological cleaning fluid and make sure the cleaners have the time, training and diligence to do a good job.

## 2 Inadequate flushing

If the urinals don't have devices fitted to operate without water, make sure you are using enough water at the right times. PIR sensor flush controllers are ideal for this purpose. We recommend that these are set to actuate a flush within 20 minutes of a urinal being used and every 12 hours when they have not been used. The reason for the latter, often referred to as a "janitorial" or "hygiene" flush, is to make sure there is always enough water in the traps to preserve the water seal. If you already have a flush controller, make sure it is working and calibrated to provide sufficient flushing.

Every urinal has to be receiving enough flush water. Our engineers often come across problems when banks of 4 or 5 urinals being flushed off one cistern. The end urinals don't receive enough water if the horizontal sparge pipes are not truly horizontal or are scaled up. Even in banks of 2 urinals, debris in the downpipe and sparges can prevent adequate flush volume reaching both urinals. We frequently find in new builds or major refurbishments, that the cistern contains a lot of building dust and debris that inevitably finds its way into the water supply pipes and causes flushing problems. The holes in the spreaders delivering water into the urinal bowls can also become blocked with debris and scale.

#### 3 Waste pipes venting to the washroom

If the washroom with urinals really stinks, you may have a broken pipe (copper ones often split with age and treatment with acids). If a problem occurs within a few days of a drain maintenance crew rodding through the urinal wastes, then they may have broken a seal on a pipe inadvertently. This does happen from time to time and, whilst the company responsible should put it right, it doesn't necessarily mean they were negligent. Sometimes, the problem may not become apparent until after they have left site, even though they checked the pipes thoroughly before departing.

If urine has seeped into the panels, cement and/or grouting, including within voids, don't expect the pipe being fixed to rectify the odour problem immediately. Any areas that have been soaked in urine during the leak should be thoroughly and repeatedly treated with a microbiological cleaner or, in the case of soggy MDF panels or ceiling tiles, replaced completely.

## 4 Broken one-way valve

Another common reason is that a valve attached to the urinal waste has malfunctioned. Many waste pipes have one-way valves fitted to stop a flush from sucking the water out of the traps, exposing the unpleasant air in the waste pipes to the washroom environment. If you don't have a one-way valve to deal with this siphon action that can be caused by flushing, then the water seal may be broken and the smells will be awful as a result.



### **5** Poorly configured pipework

Occassionally, our engineers have come across poor pipework configurations that are bound to cause problems. For example, it is not a good idea to plumb an overflow pipe from a WC cistern into a urinal waste. The smells will come up from the waste, into the cistern and out into the washroom.

### 6 Very heavy usage

If you have high traffic in a washroom, for example during a 15 minute coffee break at a conference, then don't be surprised if the washroom smells for a while afterwards. This may not be a problem with the urinals. Of course fine particles of urine are sprayed into the air and the only real solution to this is to change the air in the washroom, so ensure it is well ventilated. Failing this, then an air freshener might help to disguise the odour.

### 7 Hot washroom

If the washroom is very warm, odour causing bacteria multiply more quickly.