

## ***Perc Monitoring Guidelines (EU)***

Thank you for choosing Aeroqual for your Perc emissions monitoring needs. These guidelines apply to perc emissions monitoring for dry cleaners. Please also consult the User Guide for operating instructions for the specific Aeroqual monitor.

### ***Perc Monitoring Regulations***

The principal solvents used in the dry cleaning industry are tetrachloroethylene, most commonly known as Perchloroethylene (Perc or PCE) and petroleum-based Hydrocarbon Solvents (HCS). These solvents can pose serious environmental and occupational health and safety hazards if leaks and exposure levels are not properly controlled. In Europe, the use of solvents in dry cleaning operations is regulated under the EU Solvent Emissions Directive (SED) and the local air quality and health and safety regulations.

### ***Alarm Set Points***

The alarm set points for your monitor should reflect the occupational exposure limits (OEL) for Perc in your state or country. The **Series 200** Perc monitor has four preset alarm levels: 35 ppm, 50 ppm (default set point), 100 ppm and 150 ppm. Choose the set point most appropriate to your application or use the default set point of 50 ppm. **Series 300** and **Series 500** monitors allow setting low and high alarms between 0 and 200 ppm. It is recommended that you identify the relevant OEL and input this as one of the alarm set points on your monitor.

### ***Reasons for Perc Air Monitoring***

Primary sources of Perc exposure to dry cleaning workers include solvent spills; direct emissions when the machine door is opened during loading and unloading operations; and fugitive leaks from piping and storage tanks. Secondary sources of Perc exposure include off-gassing from freshly dry-cleaned clothes and vapours spotting agents. Modern dry cleaning machines do not create as much Perc emissions as earlier generations. However, Perc monitoring should be done for the following reasons:

- To determine the perc exposure levels of individual workers;
- To quickly identify sources of leaks in equipment; and
- To measure perc levels before and after modifications to equipment or procedures.

We recommend you use your Aeroqual Perc monitor on a daily or weekly basis to check for solvent leaks from the dry cleaning machine and storage tanks. Many regulatory agencies require a weekly leak detection schedule for dry cleaners and continuous ambient air monitoring for health and safety of workers.

### ***Monitor Installation and Calibration***

Perc is heavier-than-air and concentration will vary throughout the dry cleaning facility. Recommended height for fixing the monitor to a wall or dry cleaning machine is 1.2 metres (4 feet). For permanent installation locate the monitor near a power socket to use the AC power adaptor. Position the monitor at the rear of the dry cleaning machine for predominantly detecting leaks or position it close to where Perc emissions are likely to affect the health and safety of people working in the environment. The R33 Wall Bracket accessory is convenient for fixing and allowing portable use of your monitor.

**Ensure your monitor is not installed near other solvents which may affect sensitivity.**

Prior to first-time operation your monitor should be run at full power for 24 hours to burn off contaminants on the sensor (see User Guide page 10). For optimal accuracy we recommend a performance check of the sensor head at regular intervals. Your monitor can be checked against another monitor or instrument of known calibration at 6 or 12-month intervals. Check with your supplier if assistance is required.