

## Proposals for Tighter VOC Regime Force Focus on Emissions Control

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Following the publication of proposals for applying the EU Solvents Directive (Directive/1999/13/EC) to more than 10,000 smaller industrial processes, expectations are rising that tighter controls could soon be introduced and more businesses will be affected than ever before.

An announcement regarding the proposals published by the Department for the Environment, Food and Rural Affairs earlier this year is now expected before the end of the year and the implications for many UK industries using solvents as part of their processes or recovering solvent emissions could be far-reaching.

Diana Raine, business manager cryogenics, Air Products, comments: "Many industries are already affected by either the current Pollution Prevention and Control (PPC) regulatory regime or local air pollution control (LAPC) and for these, the focus on solvent emissions control will be nothing new. However, even these industries are likely to need to review their current emissions control systems to ensure they are fully compliant with the new tough VOC regime now and in the future."

The main change expected in the UK legislation is the reduction of the threshold at which compliance becomes necessary across a wider range of processes. For example, under the current PPC regime only those vehicle refinishing installations using more than one tonne of solvent a year are required to comply. The EU Directive states that this threshold should be lowered to 0.5 tonnes a year, a move which is expected to affect an additional 2500 installations.

The proposed regulations released by DEFRA reveal that even highly regulated industries - such as pharmaceuticals and fine chemicals manufacturing industries, will face tougher constraints. A further 15 pharmaceutical and fine chemical solvent-using processes, not currently affected by PPC regulations, are likely to fall under the new regime.

Diana Raine comments: "As the new regime is now literally just around the corner, we are already hearing from more businesses seeking tried and tested emissions control solutions which qualify as 'best available techniques' (BAT) to recover VOCs from processes in an efficient and effective way.

"Cryogenic condensation systems represent the cleanest and most effective way to remove VOCs from exhaust gas streams, in order to meet the toughest global emissions limits as currently specified by TA Luft<sup>1</sup>. Such systems are designed to be flexible to changing on site demands and can be easily adapted to recover even the most difficult VOCs."

Cryogenic condensation systems work by cooling the exhaust gas stream, which contains the solvents, to freezing point, using liquid nitrogen. The solvents are then condensed and collected and the clean nitrogen may be reused elsewhere on site if appropriate, which can significantly reduce operating costs.

Such systems are capable of recovering most VOCs, including hexane, methyl chloride, acetone, ethyl acetate, toluene, trichethylene and dichloromethane and solvent-testing may be carried out in advance of installation to demonstrate its effectiveness.

For more information about cryogenic condensation technology, contact Air Products on 0800 3890202, visit [www.airproducts.com/epm](http://www.airproducts.com/epm) or email [cryoeur@apci.com](mailto:cryoeur@apci.com).

### About Air Products

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The company is the largest global supplier of electronic materials, hydrogen, helium and select performance chemicals. Founded in 1940, Air Products is recognized for its innovative culture, operational excellence and commitment to safety and the environment. With annual revenues of \$6.3 billion and operations in 30 countries, the company's 17,400 employees build lasting relationships with their customers and communities based on understanding, integrity and passion. For more information, visit [www.airproducts.com](http://www.airproducts.com).

<sup>1</sup>TA Luft is the German Technical Directive for Air Pollution Abatement, which has set emissions limits for air pollutants. These emissions limits have set a benchmark for emissions limits across the EU.