



## SGS VAPOUR RECOVERY SERVICES FOR RECOVERY OF ORGANIC SOLVENTS

SGS can help reduce your vapour emissions, saving you money and helping you comply with environmental legislation by minimising VOC emissions.



## VAPOUR RECOVERY

Vapour Recovery Units are used to trap vapour given off by organic solvents in order to minimise the emission of these vapours (often termed Volatile Organic Compounds, VOCs). Solvents are used in various industries and many of the processes result in emission of VOCs into the atmosphere. Recovering these solvents generates the dual benefit of reducing product losses and reducing environmental emissions of VOCs.

Vapour Recovery is most effective in any process where organic solvents are stored or moved. One method involves passing the solvent vapour through a bed of activated carbon which traps the solvent then recovers it as a liquid by a combination of vacuum regeneration and condensation. The recovered liquid can then be recycled and reused.

## APPLICATIONS

Vapour Recovery Units are beneficial in recovering petroleum vapour from the following processes:-

- Oil Distribution Terminals – storage and transfer of petroleum products, such as loading road tankers, rail cars or vessels.
- Refineries – processing, storage and transfer of petroleum products.
- Chemical Manufacturing Plants – use of organic solvents in the production and manufacture of a wide range of chemicals, for example adhesives, paint and refrigerants.
- Pharmaceutical Processes – use, storage and transfer of organic solvents.
- Industrial Manufacturing processes – use of organic solvents in the application of protective coatings, the use of adhesives and the use of lubricants.
- Printing Industry – the use of organic solvents in printing and related processes.
- Food Industry – the use of organic solvents for cleaning and drying produce.

## PRODUCT RECOVERY BENEFITS

There are a number of benefits in recovering the solvent product vapour :-

- Financial benefit as product is not lost, but retained within the system



- Safer working locations as flammable vapours are contained
- Healthier working environment
- Compliance with legislative requirements
- Control of emissions to the environment
- VRU control software origination
- System performance audits
- Testing to demonstrate compliance with legislation and for HMRC declarations
- VRU Training – from basic principles to engineering operations
- Project work – from feasibility studies, through detail design, specification, material procurement, installation, final commissioning and routine maintenance
- Complete consultancy service to the Industry at all levels, respected member of the VRU trade association
- Network of highly trained expert Engineers, able to respond quickly to UK and European requirements

To give some idea of the financial benefits of Vapour Recovery, approximately 0.15% of all the petrol loaded at a terminal can be recovered. In addition to this, verification of recovery rates currently allows the excess duty paid on recovered product to be reclaimed from HM Revenue & Customs.

## ENVIRONMENTAL LEGISLATION

In order to reduce the harmful effects of VOC emissions, the EU has enacted legislation in the form of a Directive on the Control of Volatile Organic Compounds Emissions from the Storage of Petrol and its Distribution from Terminals to Service Stations (Ref. 94/63/EC). This has been enshrined in the local legislation of EU member states making it compulsory to reduce VOC emissions and demonstrate this reduction.

## HOW SGS CAN HELP?

Vapour Recovery Units are complex mechanical and electrical systems which operate in hazardous atmospheres. SGS has over 20 years of experience in supporting all types of Vapour Recovery Units and employs specialists in control instrumentation and electrical engineering. Our engineers have been trained and are equipped with everything needed to maintain and test this type of equipment and keep it effective. The services we provide include:-

- Maintenance and repairs – SGS are the nominated body of choice for most VRU equipment suppliers

## WHY SGS?

SGS is the world's leading inspection, verification, testing and certification company. SGS is recognised as the global benchmark for quality and integrity. With more than 75,000 employees SGS operates a network of over 1,250 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

For more information:

Email: [GB.OGC.Enquiries@sgs.com](mailto:GB.OGC.Enquiries@sgs.com)

Telephone: +44 151 350 6666