



ASK PEARCEY LTD PROVIDE CONSULTANCY SERVICES FOR RESOLVING AIR POLLUTION CONTROL ISSUES, INCLUDING ODOUR CONTROL AND VOC ABATEMENT.

We provide our services to both equipment suppliers and end users and we have over 20 years of in-house industrial experience in this respect.

We provide a wide range of services which include:

- ▲ Advising on the clients obligations under current legislation
- ▲ Conducting site survey and process analysis to define air pollution problems
- ▲ Design and specification of fume capture and abatement systems
- ▲ Generation of legislative documents such as Odour Management Plans (OMPs)
- ▲ Management of project tenders to ensure that the correct solution is procured
- ▲ Inspection and troubleshooting of existing equipment
- ▲ Commissioning and testing of new equipment

We have successfully resolved issues within broad range of industrial sectors including:

- ▲ Tobacco Industry
- ▲ Municipal Waste Industry
- ▲ Sewage Processing
- ▲ Food and foodstuff manufacturing industry
- ▲ Chemical Industry
- ▲ Pharmaceutical industry
- ▲ Printing/Packaging/Converting industry
- ▲ Metal coating industries
- ▲ Nuclear Industry

We have worked on projects ranging in value (to the client) from £10,000 to £7M. We guarantee that we will provide an unbiased and optimum solution to any air pollution application. We have developed a portfolio in excess of 130 primary customers to date. This includes partnerships which have serviced the requirements of multitudes of end-users.

Our goal is to provide a clear, comprehensive, cost optimised and effective route to compliance with today's ever changing and increasingly complex environmental legislation.



Welcome to **ASK Pearcey**

SPECIALISTS IN AIR POLLUTION CONTROL

If you would like to know more or have any questions please email
info@askpearcey.co.uk

If you are interested in a review your problems and quote for their resolution,
please call 01909 518 837

Odour Control

PROFESSIONAL HELP & ADVICE

If you would like to know more or have any questions please email
info@askpearcey.co.uk

ODOUR CONTROL IS A SPECIALIST AREA OF AIR POLLUTION CONTROL, MADE COMPLEX BY ITS DIRECT IMPACT ON THE PUBLIC AT LARGE AND THE METHODOLOGY OF PERFORMANCE MEASUREMENT.

Odour control requires a broad approach for guaranteed resolution.

ASK Pearcey Ltd undertake the following steps to develop effective schemes:

- ▲ Determine the compliance parameters and legislative requirements pertinent to the application
- ▲ Investigate and understand the processes that generate the odour
- ▲ Quantify and characterise the various emissions leading to odours (including fugitive releases)
- ▲ Negotiate and develop an agreed odour consent for the process with the authorities
- ▲ Design an effective fume capture system
- ▲ Where necessary, design and specify the optimum abatement equipment
- ▲ Where appropriate develop an Odour Management Plan (OMP)
- ▲ Manage the tender process and procurement of the capital project
- ▲ Supervise the installation of the system
- ▲ Commission or assist/supervise the commissioning and testing of the system
- ▲ Generate odour monitoring and complaint monitoring protocols to abide by the OMP
- ▲ Generate an on-going periodic test protocol in agreement with the OMP



Do Not's

- ▲ Do not guarantee or accept a guarantee of Zero odour at any point of any emission criteria. It is not possible to achieve.
- ▲ Do not guarantee or accept guarantees of zero or even reduced complaints. The level of complaints may be entirely out of the control of the project (other sources, obsessive complainants etc).

Do's

- ▲ Do fully characterise and quantify the emissions and invest in accurately defining the problem.
- ▲ Do involve the authorities, operations and designers in the development of the targets to be met.
- ▲ Do consider the impact of maintenance and operational cost as well as capital cost of projects.
- ▲ Do utilise PR and "community marketing" to showcase your company's commitment to odour control

If you are interested in a review your problems and quote for their resolution,
please call 01909 518 837

VOC Abatement

VOLATILE ORGANIC COMPOUNDS ARE CHEMICALS CONTAINING CARBON THAT EXIST IN THE GASEOUS PHASE AT EMISSION CONDITIONS.

Solvents and other organic, vapour releases, can be toxic to the environment (and humans), act as ozone depleting agents and cause nuisance effects such as odour, visible plumes or mild allergic reactions.

VOCs, depending on the process and whether it is an IPPC or LAPPC controlled installation, have set emission targets. The targets are generally given as carbon in mg/Nm³ (N denotes normalised -zero degrees centigrade flow.) Most VOCs fall between 20 -50 mg/Nm as carbon but dioxins and Isocyanates (amongst others) have more stringent limits.

With VOC emissions and indeed, other emissions to air, it is vital to establish a clear and accurate picture as to the character and nature of the emission. This is best achieved with detailed stream analysis, datalogged over a time period which includes normal operation and process "upsets" such as start-ups, shut downs, batch cycle changes, CIP etc. For VOCs this usually means the use of an FID or PID trace over a number of days and then specific, speciation tests at important times in the process cycles.

What we do

- ▲ Site survey and study of process to assess emission
- ▲ Review any historical test work to characterise/quantify emission
- ▲ Identify key gaps in design data requirements and advise on additional or alternative test work
- ▲ Design the emission capture system
- ▲ Design any necessary abatement equipment
- ▲ Develop commissioning protocols and also carry out site commissioning of systems
- ▲ Develop operational and maintenance instructions for systems
- ▲ Manage the project on behalf of the customer
- ▲ Ensure targets are realistic and guarantee compliance
- ▲ Train personel on VOC strategy or equipment use
- ▲ Troubleshoot problem systems

The above services are typically provided in a phased approach as many of our customers have the internal resource to carry out some of the work themselves. We generally develop a scope of works which is specific to each customer.



HOW WE WORK WITH CUSTOMERS

For an informal discussion on how we can assist please email
info@askpearcey.co.uk

If you would like to know more or have any questions about our services
please call 01909 518 837

TECHNOLOGIES ASK PEARCEY HAVE EXPERIENCE AND SPECIALISE IN WET SCRUBBING, BIO FILTRATION, ACTIVATED CARBON ADSORPTION AND OXIDISERS



In developing our solutions, abatement systems are often required and we have worked with a wide spectrum of technologies some of which are listed below:

Wet Scrubbing

The scrubbing of gases utilising an aqueous or solvent based liquor has been long established as an environmental abatement technique.

It exploits the phenomena of MASS TRANSFER, whereby chemicals will pass across a boundary between two or more contacting phases, until the concentration of the chemicals is at parity in each of the phases.

The most common types of scrubber that we design are the Counter Current Packed Tower and Venturi scrubbers.



Bio-filters

Bio-filters contact bacteria directly with the contaminated air. The contaminants pass from the air to the liquid film where they can be acted upon by the bacteria.

The bacteria breakdown the molecules of contaminant or react them with other molecules to provide themselves with energy. They may use enzymes in this process. All bacteria require ammoniacal compounds to form amino acids so that they can build cell material.



Carbon Adsorption

Carbon (and indeed, other porous solids) can adsorb contaminants on to its surface by virtue of electrostatic forces

This technology having a high efficiency removal, also has a forgiving nature and can adsorb wide ranges of compounds over equally wide ranges of concentration. The technology therefore "forgives" mistakes in emission characterisation and is hence an ideal polisher for other technologies.

Oxidisers

Oxidisers treat VOCs and other contaminants by thermal or catalytic reaction with oxygen. Thermal oxidisers treat most VOCs at around 750-900 Degrees Celsius, where as catalytic systems can be effective down to 180 Deg C. Dioxins are combusted at 1200 deg C.

Thermal Oxidisers differ in the method used to recover heat. There are two prime categories of heat recovery: primary and secondary.

Secondary heat recovery is where the fuel consumption of some external system is minimised by supplementing it with heat from the oxidiser.

READ MORE

www.askpearcey.co.uk/services/technologies.html

"Andy is an excellent process consultant who has a tremendous in-depth knowledge and appreciation of what is required to service this market"

Bob Hines, Sales Manager, Plasticon

"I can recommend Andrew as a person with great recognition and deep wisdom of air pollution control technology. I know ASK Pearcey as creative and dedicated experts"

Andre Schoonhoven, Managing Director, Pure Air Solutions

"Ask Pearcey and you will always get a solution. We have worked with Andy over the last five years on various projects with a methodical approach in resolving air pollution issues"

Steve Pickvance, Director, EIS UK Ltd

"Scottish Water Horizons is a commercial subsidiary owned by Scottish Water working to develop renewable and sustainable technologies for the growth of the Scottish economy and improvement of Scotland's environment. As part of this development we have enlisted the expertise of ASK Pearcey Ltd to advise and assist with matters relating to air pollution control, in particular with waste from energy applications and we see ASK Pearcey continuing to contribute to the success of Scottish Water Horizons for the foreseeable future"

Andrew Ross, Project Manager, Scottish Water Horizons



ASK Pearcey are consultants to Plasticon Composites on an exclusive basis for the waste water industry in the UK and Ireland.



Images supplied courtesy of the above customers.

