

# ERG NEWS



Issue 2, December 2008

## The credit crunch

Next month ERG will make their final monthly payment to Lloyds TSB to pay off our bank loan which has been gradually decreasing over the last 7 years. ERG will then have no debt and so is relatively unaffected by the credit crunch. Most companies are not so fortunate so we must all be aware! Be alert and report anything unusual however small.

## Weak pound

This weak pound is good news for ERG as we will be able to sell more competitively into our export markets, especially southern Ireland.

## Sales / Order intake

Within the industrial market there are signs that the level of sales is slowing in response to the recession. In addition, the UK water market has slowed as we are at the end of AMP 4 round and budgets are spent. The municipal waste market, however, remains buoyant and the Middle East market is showing signs of starting to move. We hope to win an order in Oman shortly.

## Reducing carbon footprint for odour control

ERG is now actively promoting two relatively new technologies for reducing carbon footprint for small scale waste water odour control applications. ERG is now offering a "greener" alternative, water re-generable, carbon instead of impregnated carbon; and bio-scrubbers instead of bio-filters.

## Reducing spent carbon waste. Is water re-generable carbon the future?

This type of carbon can be re-generated by washing with 40°C water, and is popular in the Middle East as the carbon can be re-used 6 to 8 times before requiring replacement. As waste disposal costs rise, it seems likely this type of carbon will become more attractive here in the UK.

## Reducing power usage for biological odour control

In order to enhance and improve our biological odour technology, ERG is building a bio-scrubber pilot plant. ERG's range of calcified seaweed fertilizer enhanced wood chip bio-filters offer outstanding value and superb H<sub>2</sub>S/odour removal performance, but their one draw back is that the bio-media gradually decays and blocks, causing the fans to consume relatively high levels of power to overcome the resultant high pressure drop. Bio-scrubbers with inert packing such as pumice stone or special plastic media overcome this gradual blocking problem, thereby using less power and therefore have a lower carbon footprint. They also do not require costly maintenance to replace bio-media every 4 years and so are far cheaper to operate over their 20 year life cycle.

## APC Process Engineering report strong sales

Since the purchase of APC Process Engineering Ltd. eight months ago by ERG, the company, strongly supported by ERG, has now successfully delivered a £500k contract to Egypt, and completed four other smaller contracts for prestigious industrial clients in the UK and Ireland, including Bristol Myers Squibb. Alan Boyd and Mike Herbert, the two former directors of APC Process Engineering are still actively involved and bring unparalleled experience and knowledge of certain industrial markets, in particular the metallurgical and fertilizer air pollution control markets.

## V-tex™ forges ahead

The purchase of the patented V-tex™ technology in early 2008 has proved successful. Our licensee in the Czech Republic has won another substantial order for a chlorine emergency V-tex™ scrubber in Poland and our licensee in the USA continues to be successful with small scale laboratory V-tex™ scrubbers. Here in the UK we have broken into the growing market for tar removal from syngas (produced from gasification of waste), where the V-tex™ technology, due to its non clogging feature, is superior to other gas cleaning methods. Removing these tars is critical in the power generation gasification process as these tars, if untreated, foul the engine's pistons and cause costly downtime and maintenance. We are currently installing V-tex™ systems for two major companies in this market.

## Continuing success on Scottish Water framework

Following on from the success of ERG's odour

projects last year at Annan, Paisley and Alloa last year, ERG has recently been awarded further important odour control projects at Dunnet and Troqueer and smaller odour projects at Pitlochry and Aberruthen.

## V-tex™ technology rides to the rescue

Installation of a V-tex™ scrubbing system at an electronics specialty gases production site has been completed, and commissioning will be in December/January 2009. This system is designed to require the minimum of maintenance and to work continuously. The previous scrubbing system it replaces required major and hazardous maintenance every 6 weeks involving a manual dig out of glutinous sludge from the sump tank. ERG's new V-tex™ system removes the sludge using a settler. The client, who pilot trialled the V-tex™ technology is excited and is already considering further purchases for their other sites.

## Health and safety update

We have engaged Drury PSM to revise our Health and Safety Procedures Manual to ensure it remains up to date and current. All staff will receive refresher training when this is re-issued.

## Site safety is everyone's concern

ERG treats safety as a prime concern, so all staff are encouraged to work safely at all times and to report any concerns to the appropriate supervisor or line manager. There are many potential hazards that can arise when undertaking site work. ERG staff have recently noticed a number

The V-tex™ unit at the speciality gases manufacturer for the electronics industry



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of safety hazards at client sites that could have endangered client and ERG personnel, including poor housekeeping, improperly erected scaffolding and chemicals stored in the wrong containers. Please be vigilant!

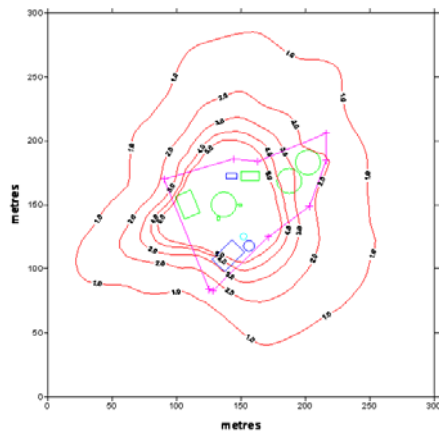
#### Keeping ERG properly trained

We are carrying out a comprehensive training review focusing in particular on site management qualifications, with appropriate staff training to be conducted in the New Year.

#### Consultancy services - Odour modelling

ERG currently has 3 qualified engineers trained in odour modelling techniques - Alex Lambert, Ken Bell and Andy Brock. ERG adopts the industry leading modelling package called Breeze, which complies with the US Government EPA approved guidelines for dispersion modelling.

As part of our commitment to maintain this expertise, Andy Brock attended a 3-day residential course on the updated Breeze odour modelling software which incorporates new EPA guidance and 3-D modelling and downwash analysis.



Example of an odour dispersion model

Since 2001 ERG has completed numerous odour dispersion models helping its clients meet their commitments under local planning regulations and, where appropriate, helping clients to define the requirements for additional odour abatement. In some cases we have even demonstrated that odour emissions already complied with local regulations and have proven that additional investment in odour abatement was unnecessary, thereby saving clients' money.

Our odour modelling consultancy service is offered independently to our pollution control



Andy Brock on a recent trip to Wembley



The Millbrook scrubber following refurbishment

services with ERG always working to meet the needs of the client and reduce costs where possible.

The Breeze software is approved for use by the US EPA as being accordance with their US EPA AERMOD Implementation Guide (January 2008). It is a model developed by US EPA and regulated in the US. Used throughout the world it is probably the most used and best understood modelling software.

#### Middle-East

We have just signed up another sales agent for Saudi Arabia and we now have Oman and Saudi covered.

#### Maintenance

We have recently completed a major refurbishment project for the Southern Water site at Millbrook. The facility is a sewage treatment site in the middle of Southampton which has a large (10m tall, 2m diameter) packed tower scrubber for odour control. The packed tower scrubber base tank had degraded and was leaking. ERG was called in to install a UPVC/GRP replacement tank that would last longer. The installation of the new tank was accomplished with the minimum of downtime and involved diverting the gas flow from the scrubber, disconnecting the ductwork, removing the packing, disassembling the

tower, and removing the top tower sections to get at and remove the old base tank. The new base tank was then fitted and the tower and packing was replaced. The entire job was successfully completed within four days, thereby minimising the nuisance to the local residents.

#### Some messages from our customers

Dear James & David,

With your help, I will remember 2008 as a good year.

We have been seen responsive and responsible by our local community.

**Francois Demauge, MD, Crown Pet Foods**

Yesterday (11 Dec) at an awards ceremony in Coventry, the GMJV Odour Control Projects of Lighthpark, Shieldhall and Annan (for Scottish Water) won an award for the best project under £10m in 2008.

Can you please pass on a message of well done and congratulations to all your employees/staff/subcontractors that were involved in this project as without everyone's help and team work we would not have made the job the success it was.

**Colin Morrison, GMJV site agent**