ERG NEWS Air Pollution



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ERG makes final payment on **DTI loan**

In February ERG made the final repayment to Lloyds TSB of its DTI business loan. In 2001 ERG,



with the assistance of its Chairman David Warby, successfully applied for a £150k loan from Lloyds TSB under the DTI scheme. The loan enabled ERG to implement its strategic business plan. This payment represents an important milestone for

ERG which is now one of the UK's leading air pollution and odour control companies, employing 30 permanent staff, and achieving annual sales in excess of £5million.

In receiving the cheque David Gale, relationship director at Lloyds TSB, who arranged the loan in 2001, commented: "This is a great success story for the DTI scheme. ERG had an impressive track record and a viable business plan for growth, but as a newly independent company it lacked the resources to fully exploit the opportunities open to it under the new management. We were convinced that the loan would unlock significant growth potential. ERG's subsequent performance has proved us right."



Lloyds TSB's David Gale receives the final cheque from ERG's Neville James

ERG pass performance testing at Hitech with flying colours

ERG has installed a 2-stage V-tex scrubber at SAFC Hitech in Bromborough. This state of the art gas cleaning plant replaces a packed tower system which required off line cleaning and maintenance every 2 weeks. The new plant which needs no cleaning is designed to scrub boron trichloride and chlorine with 10% caustic. Boron trichloride when scrubbed with caustic forms a glutinous sludge which fouls traditional scrubbers, but presents no problem to the V-tex technology which operates with no internals and therefore doesn't foul and uses a patented

unique self cleaning opposed jet nozzle. The plant successfully passed an arduous performance test comprising discharging cylinder gas directly into the inlet duct and achieved an outlet standard well below the required <3mg/Nm³

Rebalancing at Weatherless Hill saves chemicals

ERG's new scrubbing system at the sludge treatment centre at Southern Water's Weatherlees Hill site has been seeing exceptionally high H₂S loadings which has resulted in high levels of caustic and sodium hypochlorite usage. Normally extraction from sludge tanks is set at 1 air change per hour based on the empty tank volume but this has now been successfully reduced to 1/2 air change without any odour escaping from the tank covers untreated. This lower extraction rate has reduced the overall mass loading of H₂S to the scrubbing system and resulted in less chemical consumption. Neil Jefferies, ERG's commissioning manager thinks there is further scope on many sites where ERG are the framework maintenance contractor to optimise extraction rates to reduce chemical usage while still preventing untreated odour escaping.

Middle East office wins important orders

ERG is pleased to announce two new contracts in the Middle East, for Veolia Water and Segayah Water Technologies. Both contracts are for odour control systems for private developers (a scrubber and carbon filter respectively). The Veolia project is a resort complex, Qasr al Sarab (the Mirage Castle), and the Segavah contract is for a residential complex. Both will be delivered to Abu Dhabi in May.

Water regenerable carbon up and running

In another UAE project, Ajman PS#6 for Black & Veatch, ERG provided a Catalytic Iron roughing filter (CIF) and water regenerable carbon filter in



The Adiman water regenerable carbon odour control system

2008. This system was commissioned this month and is now providing excellent odour control, with no detectable odour at the stack. The system is designed to operate for more than 6 months between regenerations.

Yousif's Training Week

In early February, ERG's intrepid senior project engineer from the Middle East office, Yousif Al Shafie, braved the worst snows for 18 years to travel to the UK for training. Yousif met most of the Horsham-based staff, toured a variety of WwTW's in Southern and Scottish Water, and viewed ERG odour control equipment operating in the field. The sites included Annan and Budds Farm, both of which Yousif has been involved with, together with the ERG odour control system for the new municipal composting facility under construction at Rochdale, the V-tex scrubbers at Hitech in Bromborough, and ERG's hazardous waste flue gas cleaning system at Robinson Brothers in Birmingham.



Yousif Shafie at Scottish Water's Annan site

Yousif, who has recently gained associate membership of the IChemE, enjoyed the visits immensely, learning a great deal about how, practically, ERG's equipment works and is manufactured. Yousif takes some great memories of his first European trip back to Jordan.

ERG's reputation for quality in **Northern Ireland grows**

ERG has been awarded a £150k contract by Biwater for Downpatrick Waste Water Treament Works (WwTW) to supply an odour control system comprising calcified wood chip biofilter with polishing carbon filter. This project will be a similar installation to those completed recently for Biwater at, Seahill, Ballyclare, Carrickfergus, Whitehouse and Craigtown More with its 9 pumps stations. This new contract from Biwater who are one of ERG's most important clients

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demonstrates ERG's continuing commitment to its existing customers.

New order for Scottish Water for Castle Douglas WwTW

Following the success of winning the Scottish Water project at Troqueer, ERG have been successful in winning a £150k project for the odour control for new equipment being installed at Castle Douglas WwTW. ERG is delighted to win another contract in the south west of Scotland which follows on from ERG's success over the last 10 years at Annan, Oban, Rothesay, Hellensburgh, Ardoch, Campbeltown and Newton Stewart.

Odour control for a new pump station in London

Barhale Construction who are the one of the main contactors for the Olympic Park has awarded ERG with an important odour control system contract. The system will treat odours from a new waste water pump station. The project is being fast tracked and is scheduled to be completed by mid-August. The lead lag carbon filter system is being supplied in a vivid pick colour!

Process support to Pfizer in Ireland

Mike Herbert has recently completed 2 investigations for Pfizer in Cork.

The first was for a 3-stage complex scrubbing system supplied about 17 years ago by APC Process Engineering (now a subsidiary of ERG) which now needs recommissioning back to its original set points.

The second was for an ERG scrubbing system supplied 6 years ago which the client now wishes to use for a different application and wished us to advise on its suitability

ERG and APC Process Engineering with our unique experience and knowledge were able to support Pfizer sort out both these issues.

Rochdale odour control plant ahead of schedule

ERG is supplying an £800K plant for the control of odour from a municipal composting plant for the Greater Manchester Waste Disposal Authority. The new plant is being installed for TEG plc and is well ahead of schedule. Work started on site in January and mechanical and electrical installation will be complete by the end of April; 6 weeks ahead of the original programme.



Ductwork being installed at the Rochdale site

Right 1st time maintenance initiative proves successful for Severn Trent

This new initiative was presented to the Maintenance Department staff and other key personnel by James Scott-Bowden, Managing Director, Keith Delderfield, Sales and Maintenance Director and Bob Mosdell, Maintenance Manager. The approach emphasises the importance of planning and teamwork at all levels in the department

The benefits of the 'right 1st time' approach were recently demonstrated whilst carrying out the Severn Trent servicing visits. Even though there were some 'weather issues' to add to the challenge (deep snow!), of the 11 sites visited, 10 were executed and deemed 'right 1st time'.

ERG's maintenance team leaders, Ricky Dale and Fred Fairweather, welcomed the new initiative and are convinced improved planning and teamwork will help ERG continue to grow the department and improve the quality and cost effectiveness of the maintenance services we provide.

Maintenance

The Maintenance Department has started the new financial year with a bang by being awarded five media changes and refurbishment projects for Scottish Water, at Dingwall, Troqueer, Newtown Stewart, Shieldhall and Campbeltown.

All these projects are to be completed before the end of March. This is a massive challenge for the department who are pulling out all the stops to ensure the deadlines are met.

ERG attend Scottish Water's buyers' conference

In March ERG gave a presentation to the Scottish Water Buyers' forum which included representatives from Scottish Water, Scottish Water Solutions and Tier 1 contractors. The presentation showcased all ERG's technology, and highlighted case studies from the plants that we have already successfully installed. A large part of the presentation covered the value ERG can add to projects through odour modelling, monitoring and performance testing and system design. We also discussed possible plant maintenance, which was of great interest to the Scottish Water Operations staff.

We were the only company undertaking this type of presentation during the meeting. Other companies giving presentations focussed on ways in which they would improve their services as they had received bad customer feedback scores. This was not applicable for ERG as we have been praised for the way in which we deliver our projects.

Biogas V-tex scrubber delivered to University of East Anglia

ERG has supplied a V-tex VX-1200 gas scrubber to Refgas for use in cleaning biogas in a heat and electricity generation plant for the University of East Anglia. Refgas trial-assembled it into their power plant and did some dry runs. They have now shipped the unit to the University at Norwich, where it has been erected.

The plant is intended to take produce the biogas

from gasification of waste wood to generate heat and electricity. The unit will be commissioned once the University building programme for which the unit is intended is finalised.

Odour control for Turkey

A Turkish contractor recently placed an order for carbon filters for use in odour control at two waste water pumping stations. The filters, the filtration media and the associated ductwork were shipped to Turkey in late 2008, for the client to self install. The client has reported back that they are delighted with their new systems. Each filter is a two stage filter comprising an initial treatment through a carbon bed, followed by a final polishing stage of potassium permanganate impregnated alumina based media.



One of the carbon filters being prepared for shipment to Turkey

3rd Venturi ready for commissioning at Bexhill and Hastings

Following the successful installation of venturi scrubbers for two Southern Water sites, we have now supplied a third venturi to Southern Water which is installed at their Bexhill and Hastings treatment site at St. Leonards-on-Sea. The venturi will be used to control and remove dust from a sludge drying process, which produces pelletised fertilizer for agricultural use. This project was a challenge as the venturi had to be installed in a small cramped room, requiring an exacting 3-D design, and a complex in-situ installation. The commissioning of the unit is scheduled to be completed this month.



The venturi scrubber and separator at St Leonards-on-Sea