



SPECIAL REPORT

CSR POLICY IN EPC GROUPE

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guaranteed effects

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a new beginning

ÉDITORIAL

In this fifth edition of EPC Focus, all the activities of our Groupe are brought to you through the words of the men and women who work in EPC, in the subsidiaries and in the services.

Our Special Report on page 7 is devoted to the Group's Corporate Social Responsibility (CRS) policy. For EPC, the demands linked to the company's corporate social responsibility are an opportunity for us to progress and a means to improve our performance, to the benefit of our shareholders. As proof of this, you will find in the Special Report many examples of fundamental actions which bear witness to our commitment and continual concern for the community, the environment and the economy.

We would like to thank the contributors who have helped us to produce this issue of EPC Focus.

We hope that you enjoy the read!

We look forward to meeting you again at the end of the year for the sixth edition of EPC Focus.

Olivier Obst

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ELECTRONIC DETONATORS: GUARANTEED EFFECTS

EPC-UK supplies explosives to the British film industry for carrying out special effects. In some cases electronic detonators have to be used, for instance when the detonation requires a level of precision to within one millisecond, or when the shot can only be taken once.

In the film Stardust for example, the impact of a meteorite landing on earth had to be simulated. 'If we had used classic pyrotechnic detonators, the time delay would have been visible on screen! We therefore used electronic detonators. The effect was carried out with a blast directed towards the camera, with several curving lines of detonating cord covered with sand and peat of various colours. Each line was detonated by an electronic detonator', according to Dr Robert Farnfield, Head of Technical Services at EPC-UK.



Filming Clash of the Titans. Diver placing a line of detonating cord on which electronic detonators have been fixed. 'For filming Clash of the Titans, the use of electronic detonators in salt water was a real technical challenge; however it had the advantage of allowing shots to be taken with exactly the same light'.

For Clash of the Titans, different special effects were required. This time the fall of a monumental statue, which was pushed off a cliff into the ocean, had to be simulated. 'While the image of the statue could be created by computer, it was difficult to simulate its impact on the surface of the water. This time Electronic detonators were therefore used, with this



Filming Captain America; detonation.

shot, detonating at full force. They were hung on float placed just under the surface of the water. The timing of the detonations was determined by the way the statue was supposed to hit the water (for instance with the arm entering the water first).

The most spectacular of all the special effects produced by using electronic detonators was the blowing up of a building for the filming of Captain America. 'In this case, obviously, there couldn't be a second shot! What's more, the sequence of the detonations was very complicated, as there were lots of different charges in various places: cutting charges on the steel horizontal beams, thrusting charges on the vertical pre-cut steel beams, charges with detonating cord for blowing up brick walls, charges to blow out the windows and finally others to produce bursts of flame.'

Thank you to special effects company Event Horizon, for choosing EPC-UK. ■

'The time delay is the interval between the initiation of the explosion and the explosion itself.'

Contribution by Robert Farnfield



Filming Captain America; interior of the structure before the explosion: all the charges are in place (on the ceiling, incendiary bombs).

SAFETY, NUMBER 1 PRIORITY: WHAT OUR PEOPLE SAY

In 2014, EPC Groupe carried out its second safety culture survey in its history, the survey was the second one in three years. Result: 90% of respondents said that safety was their priority. This comes as no surprise. This percentage confirms and encourages the Groupe in its safety policy.

According to Ben Williams, Managing Director of EPC-UK: 'In our business we are involved in the manufacture, storage, distribution and utilisation of explosives, and we cannot at any time allow ourselves to neglect matters of safety. The integrity of each of us is at stake, as well as the integrity of our families, our business and the whole Groupe. This responsibility applies to all areas of our activity, and failure to behave safely in our organisation can have serious consequences'.

The personnel of EPC handle hazardous materials on a daily basis. It is imperative that these materials are controlled and used in the correct manner. 'To continue to reduce to the minimum our exposure to the risks, we must attach an even greater importance to safety procedures. That is why a revised standard has been developed for all subsidiaries, to give them the best guidance on these matters. The standard applies not only to hazardous materials in their manufacturing environment, but also to their storage, transport and use'.

Each year an audit is carried out at each of EPC Groupe's subsidiaries, to check compliance with the requirements of this new standard.

STAFF SURVEY 2014*: positive and negative

THE 3 MOST POSITIVE RESULTS:

- + Company's commitment to health and safety
- + Recognition of health and safety matters at work
- + Setting a good example within the team

THE 2 MOST NEGATIVE RESULTS:

- Putting procedures into practice
- Recording of information about accidents and near accidents

* On-line questionnaire carried out between 31 March and 9 May 2014 by EPC Groupe's 1,500 employees. Level of participation: 91%.

There is also monitoring by the Groupe to ensure that there is continual improvement, shared learning, and that safety is maintained as our number 1 priority.

Following the survey, action plans drawn up by the Groupe, the divisions and departments, to give everyone a better understanding of the need to focus on accidents and near misses.

A key action by the Groupe is to review procedures and their application, with a view to simplifying these procedures and making them reflect more accurately the work carried out. Operators themselves will be involved in re-writing the procedures, modifying the terms to reflect the reality of the situation on the ground. This is referred to by staff at EPC-UK as Job Cycle Check. ■

Contributions by Ben Williams and Thierry Rousse

SAFEX

EPC is a member of SAFEX, an association of explosives manufacturers committed to improvements in safety, who analyses all accidents which occur in any location, and circulate their findings and feedback to as wide an audience as possible.



EPC Focus sends its congratulations and best wishes to John Rathbun (bottom row, centre) and Pieter Halliday (on his right), who took up their appointments, respectively as President and Secretary General of SAFEX, on Friday 23 May 2014 at the last congress in Warsaw.

ROBIS: A SAFER ALTERNATIVE FOR IGNITION AND BLASTING

The ROBIS, a system for remotely operated blasting (Remotely Operated Blast Initiation System), is an example of the spirit of innovation within the EPC Groupe. Dr Robert Farnfield discusses with EPC Focus the project he developed with Technical concepts limited.

Can you explain the operating principle of the ROBIS?

As its name indicates, ROBIS allows blasts to be initiated at a distance, without the need for blasting cables. It has evolved out of the experience of EPC's teams, and their knowledge of the environment of quarries and open cast mines.



The ROBIS is equipped with electrodes which are used with the Euronel range of non-electric detonators. A model of ROBIS is available for use with standard electric detonators.

In terms of safety, what are the advantages of ROBIS by comparison with other methods?

It is designed for surface applications, in environments with good visibility of operations. In this configuration, the operator remains completely outside the danger zone. The blaster has a better line of vision both before and during the blast!

What is the capacity of the ROBIS and how does it function?

The system allows the blaster to initiate a blast up to 1,000 metres away, with the correct line of sight and low background I. The system is also tested and approved for working in less favourable conditions. It is robust, easy to handle, and has a waterproof housing. It is powered by standard batteries, which are very easy to replace on site. Signals are repeatedly relayed back and forth between the transmitter and ROBIS. The blaster follows each stage in the sequence to carry out the blast. Several ROBIS sets can be used at the same site without any interference between the different sets. The ROBIS signal is numerically encrypted, for total security. High levels of radio interference do not initiate the ROBIS; guarantying safety

Is a radio licence needed to operate the ROBIS?

No. The ROBIS radio frequency has been carefully chosen so as to avoid the need for a radio licence. However it is worth checking this point in each country or region.

Are there financial advantages to using the ROBIS?

The first financial advantage concerns safety: reducing the risks and the costs connected with those risks. More precisely, with remote controlled initiation systems our clients no longer need to use blasting shelters; the blasting lines are shorter and there is less travelling around the site. Clients who switch from traditional blasting methods to wireless controlled blasting enjoy many advantages in their day to day operations, and in their financial results. ■

Contribution by Ian Davies

FOCUS ON Development

SIGENCI ENVIRONMENT, A COMPANY THAT SPECIALISES IN ASBESTOS TREATMENT, JOINS EPC GROUPE

In February 2014, EPC Group acquired the company SIGENCI ENVIRONMENT which is based in Lens. This merger will increase the capacity of EPC Group's Demolition division, enabling it to deliver its services of asbestos removal, demolition and decontamination in a closely regulated framework, on a global scale.

In addition, the SIGENCI branches in Lyons and Lens will facilitate the activities of the Demolition division in these areas where it did not previously have a presence. The acquisition of SIGENCI and its subsidiaries OCCAMIANTE and ATD means that the Group has become a major player in this sector in France. ■



Contribution by Claude Chéné

CORPORATE SOCIAL RESPONSIBILITY (CSR) IN EPC GROUPE

EPC’s CSR policy relates directly to its activities and the risks associated with those activities. CSR is applied throughout the Groupe’s subsidiaries and across all activities: explosives, drilling and blasting, demolition and additives. The Groupe has been in existence for more than 100 years and displays through its CSR policy a commitment to long-term sustainability. The articles which follow are an illustration of this commitment.

GUARANTEEING THE HEALTH AND SAFETY OF STAFF: THE PRODEMO EXAMPLE

Every year the Ile de France regional ill-health insurance company (CRAMIF) awards prizes to ten companies in recognition of their activities in the area of professional risk prevention. PRODEMO, a subsidiary of the Demolition division of EPC Groupe, was one of the companies who received an award in 2014.

In its commitment to professional risk prevention, PRODEMO is constantly looking for ways of improving its equipment and vehicles so as to enhance the safety and comfort of its 46 employees. For example a tilting cabin was purchased for one of the long-arm shovels, and all shovels are now equipped with dust damping and suppression systems.

All these actions have enabled the company to achieve a safety record which is 50% lower than the French national statistics.

As well as these investments, PRODEMO regularly holds information and awareness sessions on Health and Safety for its employees. Since June 2010, one day a year has been set aside to look at occupational safety. All employees, whether working on the ground or office-based, meet in small focus groups to discuss different topics such as Transport Risk prevention, First Aid, Prevention of muscular-skeletal problems, etc. ■

Contribution by Claude Chéné

3 CSR objectives - Demolition Division

MANAGERIAL EXCELLENCE

- involve staff
- improve skills
- increase attractiveness of profession

CUSTOMER SATISFACTION

- ensure ongoing customer satisfaction
- listen to customers' needs

PERFORMANCE

- high performance, progression
- adopt a culture of innovation

MCS (MODERN CHEMICALS AND SERVICES), SAUDI ARABIA: A MULTICULTURAL AND MULTIDISCIPLINARY TEAM

MCS was established in Saudia Arabia in December 2009. It employs 170 staff at two explosives manufacturing sites: Somman in the Eastern region, and Jammon in the Western region.

Faced with different ways of operating, and with no fewer than eight nationalities, the first challenge was to train up a strong MCS team before starting up the production lines. According to Mohamad Hassan Al Momani, Managing Director of the Jammon factory, 'The building phase of the factory helped to motivate the new recruits, who learned from their differences and began to work as a team. This period had beneficial repercussions when it came to starting production.'

Continuous safety training was also effective in building up team spirit: 'The weekly training sessions gave everyone the opportunity to share best practice, gained from past experience.' This useful exercise is also effective in highlighting each worker's skills and competence.

In preparing for the start-up of the emulsion plant on the Jammon site (see article opposite), the team was also given training in explosives manufacturing. 'We benefited from the support of EPC INNOVATION, whose staff were present for the start-up, and during the transition phase they passed on their operational knowledge'.

The team overcame the usual teething problems, carrying out a successful start-up of production. 'It was a steep learning curve, but everyone proved their ability to work as a team and overcome any obstacles'. ■

Contribution by Mohammad Hassan Al Momani



MCS is located in Saudi Arabia

CORPORATE SOCIAL RESPONSIBILITY (CSR) IN EPC GROUPE

RECYCLING EMULSION WASTE: A ‘MADE IN EPC’ PROCESS



The ‘Sputnik’ system

The manufacture of bulk emulsion (commonly known as ‘matrix’) sometimes generates non-compliant emulsion, for example following cleaning of the tanks and storage silos. Until 2007, this residual material was considered a valueless waste product.

To remedy this situation, EPC Research and Development teams worked out a procedure in 2006 which enabled the recycling of non-compliant matrix by reintroducing it, after treatment, back into the production process. Since 2007, 380 tonnes of non-compliant matrix have been treated in this way. Today this treatment has surpassed the realms of R&D and is an integral part of production. As a result, subsidiaries in France, Belgium and England have been supplied with a machine known as the ‘Sputnik’.

The non-compliant products are collected in ‘IBC’ bulk containers which are then sent to the production sites. The recycled emulsions are reintroduced into the matrix manufacturing process in proportions of 5%, i.e. one IBC for every 25 tonnes of product. This process reduces costs because less material needs to be purchased, and reduces risk by avoiding the need to burn non-compliant emulsions. ■

Contributions by Gilles Jauffret and David Jacquet

70 TONNES

That’s the volume of non-compliant product coming from Romania, currently being treated by EPC FRANCE



EPC IVORY COAST: TAKING PART AND GETTING INVOLVED

OKO is a village of eight hundred inhabitants, situated in Centre-West Ivory Coast, in the Béliér region. It’s there that EPC IVORY COAST’s production plant was established in 2014: a project in which the local community was actively involved in helping to build the factory at the outset.

Jean-Jacques Koua, Managing Director of EPC IVORY COAST, underlined the company’s desire to involve the local community: ‘We needed to recruit 150 workers for the building site. These were all recruited from six villages close to the site’. We are now in the operation phase, and 19 people are working at EPC in OKO, six of whom come from the local community. The plant is located 40 kilometers from Abidjan. Five staff are employed in the storage of explosives. On a more global scale, EPC IVORY COAST is committed to supporting the regional economy. The company has taken part in revenue-generating activities which improve the living standards of the people of OKO.

The first project was planting cassava and peppers. ‘We obtained funding via the sub-prefecture for the National Agency for Rural Development (ANADER); this is a government organisation for supporting the local community and managing projects. The local people are organised into agricultural cooperatives. The revenue from the sale of cassava and peppers will be paid into a bank account managed by the villagers themselves. These actions have been carried out in response to the wishes of the local people, who have drawn up a list of projects by order of priority. In one year, 25,000 m² of cassava and peppers were planted.’ The company also takes part in local activities, whether cultural, festive, or religious. ‘We have rapidly positioned ourselves as a key player, keen to support the region’s development. We have attended openings of roads in the villages of OKO and FONDI and helped to build a fence for the municipal school of Kokumbo sub-prefecture, 15 kilometers from our factory’.

From now on, the local institutions know that they can depend on EPC IVORY COAST. From the point of view of the local people, these projects contribute to the development of links and good mutual understanding. ■

Contribution by Jean-Jacques Koua



Cassava plantations in Ivory Coast

CORPORATE SOCIAL RESPONSIBILITY (CSR) IN EPC GROUPE

CSR: A COMMON VISION FOR THE EPC'S DEMOLITION DIVISION

Another benefit of CSR is that it fosters a shared sense of belonging amongst staff. Here is an interview with Claude Chéné, Manager of the Demolition division.

Why did you launch the CSR initiative?

In June 2013, when we launched this initiative, we were in the process of setting up the Demolition division and deciding on its structure. Lengthy discussions took place, led by experts, concerning CSR. This gave the men and women based at different sites the chance to understand our direction and to take ownership of it. Many exchanges took place which enabled us to define our values, our vision and our medium term objectives. This meant that our teams were able to enter into a joint initiative, shared by all the sites of the Demolition division.

Why CSR in particular?

The social aspect of CSR fits in well with our culture: it is men and women in their diversity who create our wealth. We noticed during the discussions that in each of the structures which make up the Demolition division, the people are the most important factor and our common denominator. Furthermore, the social, environmental and financial elements of CSR are an essential part of our activities: preserving the environment (waste management and recycling etc.). Our relationship with stakeholders (neighbours, other organisations, customers) is another key element in the success of our projects.

What stage has the project reached to date?

The project is pragmatic, straightforward and centred on continuous improvement, which is essential in the context of our performance goals. We have drawn up definitions for the different stages of deployment and monitoring, based on our values, vision and objectives. We are now in the implementation stage. While it is too early to evaluate the success of the initiative, our commitment to CSR has already brought benefits: it guides our actions, facilitates communication and gives us a common, shared point of reference. To sum up, CSR gives direction to our work and vitalises the energies of the staff. ■

Contribution by Claude Chéné

TRACKING OF CIVIL EXPLOSIVES: A QUESTION OF PUBLIC SAFETY

On the 5 April 2015, the new European directives come into force to improve the tracking of civil explosives (directives 2012/4/EU and 2008/43/EC). In order to meet the new requirements, EPC Groupe have involved all its teams operating in Europe: all the companies of the Groupe have taken part in the Track & Trace project.

This project has required a huge investment in time. 'Fortunately, we anticipated this, and work began more than two years before the new directives came into force' according to Carmen NEIRA, Head of the 'Supply Chain' project. The objective was clear, but far from simple: 'It was vital to find a solution that was shared by everyone, respecting both the European directives and the laws applying to each country in which we operate'.

There was close collaboration with all other operators in the market: suppliers, distributors, customers and competitors. The aim was to reach a consensus of good practice regarding traceability, including standardisation of labelling, I.T. communication, hand-over of responsibility during the tracking process, etc.

The process started with gathering all information regarding storage sites, packaging, origins and names of everyone involved the supply chain, and this information was stored in a secure database that conformed with European standards of security. 'As far as the Groupe was concerned, tracking was carried out from the point of manufacture of the products in our factories, or from the time of reception of the products bought from third party suppliers, right up to the final point of delivery at the customer's site, via our storage sites (57 warehouses in Europe)'.

The question of being able to track explosive products is a major issue where public safety is concerned, and is an integral part of our approach to social responsibility. ■

Contribution by Carmen Neira



All divisions of EPC Groupe are involved in the Track & Trace project



The tracking of civil explosives has been tightened up since 5 April 2015, as part of our social responsibility policy

CORPORATE SOCIAL RESPONSIBILITY (CSR) IN EPC GROUPE

CRISIS MANAGEMENT: A COLLABORATIVE PROJECT

Ballidon quarry (Lafarge-Tarmac, United Kingdom). A Multiblend lorry is on fire, an operative is injured; lots of journalists are hovering around the quarry site. This is the scenario in the crisis management exercise organised by EPC-UK teams in collaboration with Lafarge-Tarmac, on 9 October 2014.

Inspired by an accident in Norway at the end of 2013, the exercise was an integral part of EPC Groupe's safety policy. Diane Cartledge, Head of Quality at EPC-UK, explains: 'The situation had to be as realistic as possible; to achieve this, only six people knew about the plan and the details of the simulated accident. On the morning of 9 October, I outlined the scenario to the Multiblend driver who had just arrived on site, and asked him to take the necessary measures.' Just then the alarm went off and the crisis management procedure swung into action.

Managers at the quarry and the EPC-UK management team had been kept informed, and all lines of communication had been tested. The quarry manager gave the instruction to evacuate the site, and the injured person was taken care of by the rescue services.

At the Groupe's head offices in Paris and Alfreton, two crisis teams were assembled with the aid of videoconferencing. For two hours, there was permanent communication between the quarry managers and the team in Alfreton. A media consultant soon arrived in Alfreton with his cameras to represent the press. He recorded people's reactions and interviewed spokespersons who were nominated in the emergency procedure'.

In Paris, the Groupe crisis management team was kept informed of how the situation was developing in real time and was ready to assist if needed because of the type of crisis, its size or the way things were developing. This was not required.

Two weeks later, a meeting was held at the head office of EPC-UK, in collaboration with the manager of the Lafarge-Tarmac quarry. 'We evaluated the exercise, looking at actions taken and watching videos of the event' stated Diane Cartledge. This exercise gave us the opportunity to improve procedures, provide further training, and strengthen our relationship with the customer. ■

Contribution by Ben Williams



Press Conference at EPC-UK Headquarters

JAMMOM FACTORY (SAUDI ARABIA): MORE EXPERTISE, LESS RUBBISH

Since February 2014, MCS (Modern Chemicals and Services), a subsidiary of EPC Groupe in Saudi Arabia, has been producing cartridged emulsions (Nitram) in its Jammon factory. The issue of waste generated was a real problem at the beginning. The team put into place an action plan of corrective actions, which rapidly produced good results.

The action plan to reduce waste products was implemented in July 2014. As a result of it, we were able to see a direct link between the production team's learning curve as regards production, quality and maintenance, and a reduction in the amount of waste. According to Mohammad Hassan Al Momani, manager of the Jammon site, 'Once people had acquired knowledge and understanding of the issues, there was a speedy reduction in waste. At the end of the year, after only six months of activity, we had achieved a level of 1.3 %, which is comparable with a factory which has been operating over several years! This performance came about notably because of the use of tools and techniques made available by Lean management, Gemba, PDCA and 5S. (We have added a sixth S, for Safety, to this list').

A consequence of the favourable outcome was that costs of purchasing raw materials dropped significantly. But above all, the amount of waste to be incinerated dropped drastically. 'For the team, that represents a lower exposure to risk, which is a great advantage in terms of safety'. ■

Contribution by Mohammad Hassan Al Momani



MCS produces cartridged emulsion in its Jammon factory

ZERO WASTE ?

A 'zero waste' strategy takes into account the whole life cycle of a single product; it's not easy to achieve such a demanding level of detail. 'However, in collaborating with EPC INNOVATION (EPCI), and the management of operations, we know that we can continue to improve our activities and reduce waste to the minimum and achieve best practice'.

LEAD REMOVAL: ONE OF THE SPECIALITIES OF ATD

ATD is a subsidiary of EPC Groupe's Demolition division which removes lead from buildings that are due to be demolished or that are undergoing restoration. A complete package is offered to the customer including lead removal, asbestos removal, demolition and decontamination.



A large scale operation on the interior of the heritage building of Les Invalides

On these sites, the same as with asbestos removal, concern for public health is paramount: this is seen in strict regulations for protection of staff, third parties and the fragile environment. According to Benoît Lanfry, Managing Director of ATD, 'Everything is carried out in a hermetically sealed zone, from which we operate on the building being treated'.

Air scrubbing, sand blasting or chemicals?

Air scrubbing (aerogommage) was used by ATD to decontaminate the chapel of the Lycée Corneille de Rouen between March and April 2014. Guillaume Lemerrier, Head of Operations, explains: 'This method is more delicate than sand blasting or using chemicals and treats dust without affecting the surface. We project very fine sand under pressure. The grains of sand are analysed for their lead content and the surface is treated accordingly. Workers at the site have protective clothing and equipment, the same as with asbestos removal. Employees receive regular medical checks, including lung function (spirometry) and blood tests.

Two other restoration projects were carried out in 2014, one of them of considerable size. These were on heritage buildings: the Dufour pavilion at the Chateau of Versailles and the courtyard of the Invalides building in Paris.

ATD employs 102 staff, is based in Rouen and operates throughout France. ■

Contribution by Benoît Lanfry



Restoration project carried out on the courtyard of the Invalides building in Paris

**ELECTRONIC DÉTONATORS:
‘HIGH TECHNOLOGY IN THE SERVICE OF DÉMOLITION**

Two 19-storey buildings were demolished in Glasgow at the end of 2008 in a controlled explosion using explosives supplied by EPC-UK. This was a routine operation for the town, but an outstanding event for the profession, because this was the first time in the UK that buildings were demolished using electronic detonators.

Since then the practice has become widespread, particularly for complex demolitions. Thanks to their high reliability and their precision to one millisecond, electronic detonators enable engineers to calculate very precise levels of floor movement. Using these calculations in the demolition scheme, it is possible to make a building collapse within its own footprint, or in a certain direction.

Also, thanks to electronic detonators, demolition designs have become much easier to put into practice: ‘From now on, we are capable of carrying out simple and rapid tests of the whole circuit, from a single detonator to a completely wired building. This has enabled the engineers to reduce the quantity of inherent circuit redundancy that would otherwise have to be incorporated for non-testable systems such as shock-tube. In turn this has formed convincing evidence for the reduction in overall insurance premium.

Three years later in 2011, the demolition of the Glencairn Tower in Motherwell, Scotland, illustrates again the benefits of using electronic detonators. In the words of Dr Mark Pegden, Senior Explosives Engineer at EPC-UK: ‘It was an old residential structure consisting of 17 storeys, built in a rather unusual way around a massive pre-stressed steel framework. The demolition plan was made more complicated because

there were houses around the building on all sides, as well as a school, a retirement home and the local law courts! As there was not enough free space for the whole building to collapse in one direction, an innovative plan was drawn up, which would make the infrastructure collapse in four different directions at the same time, after a sequence of very precise detonations.

Explosives engineers from EPC-UK worked with the company in charge of the site, Precision Demolition Company Ltd, to produce models of the demolition sequence. Their aim was three-fold: to control the movements and any potential levels of overpressure of air, to evaluate the precise levels of vibration on the ground and to check the final sequence of electronic detonator delays.

The demolition of Glencairn Tower was carried out perfectly, in accordance with the plan previously drawn up. The following week, the British newspaper The Independent devoted a double-page spread to this demolition, under the heading ‘The Art of Demolition’. A year later, in 2012, Precision Demolition Company Ltd received the prestigious Industrial Demolition Prize for ‘The Explosive Demolition of the Year’, awarded by the magazine Demolition & Recycling International! ■

Contribution by Mark Pegden



Demolition of the 17-storey Glencairn Tower in Motherwell, Scotland

CERTIFICATE OF COMPETENCE IN BLASTING: FIVE SESSIONS FOR AFRICA IN 2014



The training programme is based on solid theoretical foundations: blast designs in the field, industrial explosives, ignition systems, blasting sequences (ignition and safety), crushing (terminology and technology), charging the mines (technology and safety), blasting and blasting incidents, regulations regarding purchase, storing and transport of explosives, harmful effects of mining blasts. Half a day is reserved for practical exercises in a quarry.

The Training team at EPC FRANCE sends a warm thank you to staff of the subsidiaries in the African zone, for their active and effective participation in the organisation of the training sessions.

In 2014 five training sessions were organised in Ivory Coast, Senegal, Morocco and the Republic of Guinea, in collaboration with SMA (Société Mine Afrique). The training was validated with an exam similar to and of the same level as the one organised in France. A certificate was awarded to all candidates who obtained the necessary standard.

In France, the Certificate of Competence in Blasting (CPT) is a diploma recognised by the national department of education. It is on the same level of difficulty as the programme for Africa: thirty-five hours, at the end of which there is half a day of practical exercises. At the end of the course there is an evaluation composed of a case study, a multiple-choice questionnaire on safety and the environment, and a practical test which takes place on site; this leads to an assessment and certification of the level reached by each candidate.

The members of the examining committee are chosen by the head of the EPC subsidiary in the country concerned. They are professionals, experienced in mining and they have the ability to evaluate and validate the competence of the candidates. Out of the five sessions organised in 2014, 95% of the candidates were awarded the certificate/.

'Our teaching has been enriched by the experience of our students and by the experience of the EPC subsidiaries, with whom we have partnered for many years' according to Jean-Louis Samiez, Head of Training for EPC FRANCE. The training creates a strong relationship with the students. Their level of satisfaction is around 90%.

From 2015, the training department of EPC FRANCE is planning to hold training in 'Mining Add-ons' in the African zone. These will complement the CPT training, and their objective will be to make the best use of mining equipment and software. The teaching is based on the principle that 'You can't beat learning from the expertise of technicians and engineers'. The proven success of this delivery style saw 8 students successfully complete the course in Algeria. ■

Contribution by Jean-Louis Samiez

EPC-UK OPENS THE NEW TRAINING CENTRE FOR EPC GROUPE

On 20 January 2015, Olivier Obst, Chairman of EPC Groupe, opened a brand new centre for training and development at the EPC-UK headquarters in Alfreton, Derbyshire.

EPC-UK is a great supporter of personal development and skills training, and is planning to run training sessions accredited by the Institute of Quarrying, Mineral Products Qualifications Centre, Homeland Security Qualification and Highfield. These national qualifications are the industry's way of ensuring the competence of blasting engineers. The courses are run by Dr. Rob Farnfield and Mark Pegden, two of the best teachers in the sector.

'We have acquired expertise in the management and organisation of our training programmes, and we are pleased to share this expertise in a new conference space which is perfectly suited to a large number of commercial organisations', says Ben Williams, Managing Director of EPC-UK. The training center has two flexible meeting rooms, fully equipped with audio visual equipment and provides free internet connections, including its own welfare facilities. ■

Contribution by Ben Williams



Many customers came to the opening ceremony, accompanied by representatives from EPC-UK and from EPC Groupe. Here we see Olivier Obst, Chairman of EPC Groupe, and Ben Williams, Managing Director of EPC-UK, unveiling a commemorative plaque.

NEW TANKERS: BIGGER, SAFER AND MORE ECONOMICAL



EPC LOGISTICS has brought new trucks into service (see below). Their capacity is more than 5 tonnes greater than the old trucks (above).

In 2014, EPC LOGISTICS brought into service new tanker for transporting explosives emulsion matrix from their production sites to depots. These new vehicles replace the existing fleet, with real benefits for the Groupe.

The new trucks are made from modern, ultra-light materials. They do not in any way compromise safety standards: the 44-tonne gross load limit which applies on most European roads is still respected; only the Swedish subsidiary uses a bigger version since Sweden allows loads up to 60 tonnes on its motorways.

Darrell Howard, Head of the Logistics function of EPC Groupe, says: 'they have a capacity five tonnes greater than the old trucks (from now on, 29 tonnes), and their use will enable companies to reduce the number of journeys needed, thus reducing fuel consumption and carbon footprint. Additionally, with a lower centre of gravity, these new truck offers greater safety.

In 2015 the EPC LOGISTICS fleet in Europe will be completely replaced. ■

Contribution by Darrell Howard

FOCUS ON Innovation

NEW ON-SITE PRODUCTION UNITS FOR MEMU AND SPUR

In recent years, EPC INNOVATION has greatly increased the standardisation of equipment mounted on mobile explosives manufacturing units, the MEMU (Mobile explosive manufacturing units) and SPUR (Smart process for underground re-pumping).

From now on, for any type of chassis used for the MEMU, and independently of their country of destination, they will have a number of identical, standard equipment items: pumps, sensors, electric cabinet, command control with automaton and touch screen, carrier, reel of hose, hydraulic circuit, etc. There is only one exception: the boiler, because of the ADR constraints of each country. .

Stéphan Mencacci says: 'this homogeneity has many advantages, in terms of financial advantages and company image: it enables us to rationalise our purchases, keep and train staff, and reduce stocks. It also enhances the image of EPC Groupe as high-tech and high-performance, wherever it has a presence.

EPC INNOVATION has also improved the equipment of SPUR, with purer matrix, sensitised by gasification for underground application. 'In future, many markets will need underground applications for tunnels or mines. That's the reason for developing peripherals around SPUR for charging horizontal holes and vertical rising holes'. In parallel, EPC is developing products with a formulation suited to these particular conditions, in particular a product with a

certain type of rheology, which maintains its shape in rising vertical holes. ■

* Rheology is the study of the behaviour of materials such as thinning or deformation by the effects of time, pressure or weight.

Contribution by Stéphan Mencacci



Example of SPUR (Smart Process for Underground Re-pumping)

IAN W. DAVIES

In this edition of Focus, Ian Davies takes his place in our magazine's gallery of portraits.
 Ian graduated as a Mining Engineer from the University of Leeds. After 23 years in the explosives industry in South Africa, England and Ireland, he joined EPC-UK as Commercial Manager of the EXPLOSIVES division in 2004.

Since January 2012 Ian has been Head of the entire range of EPC-UK's commercial activities, His role is to, identify the synergies between our different operating activities, and to develop projects which are innovative, creative and value-adding solutions for our customers!
 Ian is a member of the senior management team responsible for integrating the five operational divisions of EPC-UK, whose employees are united in the philosophy: 'One focus, One company, One vision, One mission'.

He is also responsible for 'Key Accounts' - contracts with our global clients. 'I establish a long-term relationship with these clients. I am their point of contact and have to understand their particular needs, keeping in touch with their commercial strategy which is constantly changing'. By proceeding in this way, Ian and his colleagues have built up new contracts, building around innovative and durable solutions.

'Since I entered EPC Groupe, there has never been a dull moment. I am responsible for a wide range of different activities. I approach each new contract as a challenge and a mission. In my relationship with customers I strive to embody the key values of EPC Groupe: safety, passion, integrity, professionalism and respect'. ■

Contribution de Ben Williams



IAN W. DAVIES,
 Head of Commercial Activities for EPC-UK,
 and Head of Key Global Client Accounts for
 EPC Groupe

DAVID HARWOOD



David Harwood, EPC GABON

David left us suddenly on 15 July 2014. His departure affected us deeply - it was a great loss not only for EPC GABON of which he was a director, but also for EPC Groupe because, apart from his exceptional professional skills, David was a man of unfailing generosity. He knew how to give his time, how to listen and he believed in humanity. A dedicated teacher, David had a gift for explaining the most complicated ideas with such ease and straightforwardness that he made them comprehensible to everyone.

Those who worked with him or met him remember him as an attentive man, outgoing, positive and generous. His force and his humanity made him an exceptional human being.

We miss David today. Although he is no longer among us, he left to those he knew a sense of value and respect for others. He rests today in Gabon which he knew and loved so well.

Our thoughts are with David's wife Marante and their children. ■

Contribution by Olivier Vandenabelle

NEWS FLASH

EPC CONGO: A NEW BEGINNING

EPC CONGO became fully operational once more in January 2014. The subsidiary is operating today with temporary explosives depots which will be replaced in mid-2015 by permanent buildings in compliance with the Groupe's safety standards.

In the words of Olivier Vandenabelle, Africa and Middle East Manager: 'As in other African countries where we have a presence, EPC CONGO held a stock of explosives to supply the national market for quarries, public works, cement works and petroleum prospecting companies'. The warehouse was built in the 1950s on the outskirts of Pointe-Noire, a coastal town in the Congo.

But over time the warehouse was overtaken by urban expansion, the result of rapid growth of the town which now has a population

of more than 700,000 inhabitants. The subsidiary was forced to halt its activities almost completely. Today, this period is over, and there are new warehouses located about 60 kilometers from the former site, marking a new beginning in EPC CONGO.

The Congolese Explosives Society was created in 1953. It has been wholly owned by EPC Groupe since 2010. The Manager, Jean-Eudes Bassoumba, has been in post for nearly thirty years. There are seven members of staff carrying out administrative and commercial functions associated with selling cartridges and accessories on the local market. The outlook is promising, in view of the growth in the mining industry. ■

Contribution by Olivier Vandenabelle



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N° 5 - April 2015

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Agence SHAÏKOU Communication - Nantes

Editorial:
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Writing/rewriting/titles:
Albéo (Agnès Laurent)

Photo credits:
EPC GROUPE

Printing:
ABELIA Imprimerie

Design and realisation :
Agence SHAÏKOU Communication - Nantes
EPC GROUPE - Société Anonyme d'Explosifs
et de Produits Chimiques RCS
Paris B 542 037 361
61 rue Galilée, 75008 Paris.