

KPO builds partnership with the Aksai Lyceum

On 30 January, the Aksai Lyceum #15 celebrated its 50th anniversary. The ceremony, which was held in the Aksai School of Arts, was attended by a KPO delegation led by HR Controller Sergio Zanovello.

KPO is a major employer in the WKO and many graduates from the technical universities and colleges of Western Kazakhstan, including the Aksai Lyceum, will have long and exciting careers with KPO.

Sergio Zanovello in his welcoming speech noted the importance of close relationship

with the Lyceum.

"We have had a very close relationship with the Lyceum for about three years now and during this time we have built a strong foundation for our future cooperation. KPO is committed the long term development of both our own staff and also those who will become the future of our company."

"The Lyceum plays a very important part in our broader training and development programme and we are pleased to announce that in 2009, KPO will provide some \$1.5

million to upgrade these facilities. Once complete, the Lyceum will be equipped to provide international standard technical training in a modern environment."

"I would like to extend my sincere congratulations to the Director Mr Mirbolat Diyarov and the all the staff who have contributed to growth and development of this important training facility over the last 50 years."

In closing, Sergio Zanovello said: "We look forward to working with you in 2009 and for many years to come."



Sergio Zanovello congratulated the director of the Aksai Lyceum

4th Train Forges Ahead – 2009 and beyond

The sky line at KPC is changing as the Fourth Train Project, having now completed the engineering design and procurement phases, moves forward with construction activities both within the existing KPC operating plant and at the new Greenfield site adjacent to the existing facilities.

The project which comprises an additional higher capacity Stabilisation and Sweetening Train, export and flash gas compression, additional process utilities and additional infield pipelines is scheduled to be commissioned and on stream during 2010. Key achievements to date include installation of approximately 4000 concrete piles, pipe rack and main process plant structure steel. The successful transportation and installation of the heaviest, widest and largest pressure vessels in KPO history was a significant achievement. The process stabiliser column is the largest lift by KPO at 122 tonnes and 36 metres in height.

programme due to limited works now required within the existing plant during 2009.

The project's continued commitment to HSSE has resulted in industry leading safety figures being achieved to date. Progression without LTI's presently stands at over 6.5 million man hours for the full project and in excess of

include the introduction of a construction site electronic entry security system and the use of metal fabricated trench box technology. The trench boxes are for utilisation in deep trenching activities which at the Greenfield site extend to 7 meters in depth. Safety Engineer Altynbek Baimukanov has been working within the



4.5 million man hours for all construction activities. In addition the project received the inaugural BG Chairman's safety award for its Asset Integrity initiatives and implementation programme during 2008.

Karachaganak field for over 5 years and was transferred to the project early 2008.

"The overall HSE initiatives have proved effective in establishing a safe working environment – the that these figures could not have been achieved without the high level of cooperation we currently have with all the T4 contractors and subcontractors. We do everything needed to ensure compliance to the newly achieved ISO14001 certification and always seek best practice to enhance our overall safety approach."

Significant milestones for 2009 include completion of the winter work programme, mobilisation of additional construction contractors, completion of the scope within the existing KPC plant (Brownfield) and the commencement of field utility commissioning to support the ongoing construction activities during the 2010 work season, prior to facilities coming on stream during 2010.



The successful completion of the 2008 shutdown work programme has resulted in the new facilities being commissioned with no planned interruption to the existing operating facilities. The result is significant risk reduction to the project work

"Project team and their contractors and subcontractors are congratulated on their performance in achieving this total." Mahmood Ahmed, PDD HSSE Manager.

Current HSSE initiatives being employed by the project

National staff receives NEBOSH certificates

Nineteen Kazakh employees representing KPO from Well Operations and HSE have successfully completed the NEBOSH Certificate Programme.

The recent NEBOSH Graduation & Awards Ceremony was held at the Marco Polo Hotel in Aksai. Graduates were presented with certificates by KPO HR Controller James Clark and Murray Harrison, Field HSE Manager.

In his speech James Clark noted that the education and professional development of Kazakh staff is one of KPO's main priorities. He said: "The NEBOSH Training Programme allows employees to obtain the knowledge and skills necessary for further professional growth and development."

According to the or-



ganisers of the programme, the NEBOSH Certificate is an ideal professional level qualification and is intended primarily for those responsible for safety & environmental issues. It also offers a wide range of qualifications that provide the perfect grounding for a career in health and safety.

It is also necessary to note that the NEBOSH National Certificate is a prestigious and demanding professional qualification for those wanting to further their career in Occupational Health and Safety.

Congratulation from Murray Harrison

KPO supports Kazakh language

In support of the development of Kazakh language, KPO is providing Kazakh language courses in both Uralsk and Aksai.

To ensure that the use of Kazakh language continues to grow across KPO, a workshop was recently held at the training Annexe (Bechtel). This workshop was run by KPO's own Language Training Coordinator, Natasha Dementyeva. The aim of the workshop was to develop the range of skills and approaches used by Kazakh language teachers to ensure they meet international standards and the classes delivered reflect recent development in language teaching.

Speaking about the workshop, Natasha commented, "we aimed to make the workshop interactive, utilising the vast experience of our eight Kazakh language teachers. Here in KPO we are trying to develop a centre



of excellence in the teaching of Kazakh, which has been a neglected area historically. We are currently working on our own KPO Kazakh language course book which we hope to complete by the middle of this year. This will embody modern techniques and will be a new and exciting development for Kazakh language in the country."

Nata Urasheva, the Kazakh Language Project

Manager, thanked Natasha on behalf of the teachers and pointed out that a new Kazakh business terminology reference work had recently been completed by KPO translators and would facilitate the continued growth of Kazakh language throughout KPO.

Natalya Dementyeva with her colleagues

Protecting our environment



Head of Corporate Environment Louis Jacobs

Attaining maximum environmental protection during the development of one of the largest oil and gas deposits in the world is not a simple matter. The environmental protection programme which is implemented at Karachaganak Petroleum Operating BV (KPO), focuses on two main areas.

The first is the use of modern and efficient technology designed to reducing emissions and the construction of environmental protection facilities. We asked the Head of Corporate Environment at KPO, Louis Jacobs to discuss the measures being implemented today to achieve this goal.

- With any large project, it is important to set priorities. When it comes to Karachaganak and the ecology of the Ural area, what do you think is the most important and urgent?

- "The scale of the reservoir and the amount of recoverable hydrocarbons is significant. Gas production at Karachaganak today reaches 14.97 billion cubic metres, and liquid hydrocarbons – 10.4 million tonnes per year.

"Karachaganak is the largest existing gas field in Kazakhstan. It provides nearly half, or to be precise - 45% of the total gas production of Kazakhstan. As for condensate and oil, it represents some 17%."

"Of course, compliance with all regulatory requirements is our main priority. A significant decrease in the volume of process emissions has been observed over the past three years. KPO is industry leading in terms of gas utilization rates."

"Today, this totals 99.78%. Achieving such impressive gas utilisation figure was first possible owing to a significant reduction in

the amount of the flared gas from the process and well development activities. Thus, during 2006, the capacity for the flaring of gas was approximately 69 million cubic metres, taking into account all manufacturing activities, including test wells."

"In 2007, this amount dropped to 44 million cubic metres, while in 2008 – it has decreased even further to 33 million cubic metres. These figures illustrate the significant improvement in our environmental performance."

- How this is consistent with the fact that payments from KPO for the emission of repugnant substances increases from year to year?

- "Despite reductions in emissions, the financial changes for excess emissions have increased significantly. Even though the volumes of emissions may be reducing, the environmental payment associated with emissions is disproportionately larger than previous periods. For example, compared to 2007, in 2008 – the payment rates for gas flaring has increased eighteen times."

- What kind of new environmental technology has been introduced at the field in recent years?

- "As for technological changes, production at Karachaganak has undergone a radical upgrade over the past five years. A stringent environmental requirement was a primary consideration in developing the field. It was at Karachaganak that for the first time in Kazakhstan, technology for the large scale re-injection of sulphur gas into the reservoir was applied."

"This allows us to maintain reservoir pressure and extract more liquid hydrocarbons. At the same time, the need to flare associated gas is all but eliminated. The sulphur recovered with the crude hydrocarbon materials is returned to the reservoir. This is also a key factor in the protection of the environment."

"At Karachaganak we are also utilising "super-green" burners. Air compressors filter the air in the combustion zone, whereby the process of the formation of soot and fine hydrogen sulphide and methane particles is eliminated. The innovative Mega Flow separator technology for well testing, which

was developed by British company Expro is also used by KPO. This means that during well testing, hydrocarbons are not burned, but rather are recovered to the oilfield systems for further processing. This not only has significant benefits for the environment, but it also recycles precious hydrocarbons back into the processing stream."

In total KPO has already invested more than 138 million dollars in environmental protection measures, and we are looking to continue to build on improvements in this area.

- How and by whom is environmental monitoring conducted at Karachaganak?

- "KPO's environmental monitoring is carried out by KPO ecologists and experts from the professional Gidromet LTD laboratory. This is one of the only laboratories in the country that is accredited under the state standards system for all environmental components. The air samples that are analysed alone total approximately 110 thousand units annually."

"The results show that the concentrations of major pollutants near the field and adjacent areas do not reach the maximum permissible concentrations. The company meets ambient air quality standards for all monitored parameters. These measurements are checked regularly."

"In addition, the continuous monitoring of the air on the border of the sanitary protection zone is carried out using 12 monitoring stations equipped with precision tracking instruments. They work around the clock in automatic mode. KPO ecologists also have a mobile operational monitoring station in their arsenal, mounted on an off-road vehicle, which is equipped with sensitive analysis instruments. It is possible to obtain detailed information on the status of air quality and the content of pollutants, even in remote places."

"This is not to mention that people, especially those who live in settlements closest to the field are continuously informed on the observation results. This approach has been justified, and the reason is simple: rumours and speculation never arise where there is credible and timely information. Therefore, the residents are involved in the

discussion on the upcoming project phases and main areas for further development."

- However, how is this set of activities consistent with Kazakhstan environmental law? In fact, requirements for subsoil users have become more stringent.

- "In this respect, our goals coincide. As a consortium of foreign companies, we are not only implementing a long-term environmental protection strategy, but also one for the prevention of the negative impact of the deposit, to prevent accidents and ensure personnel safety. The objective of all environmental measures

Policies which encourage long-term and mutually beneficial partnership are among our main priorities."

- To what extent is such a huge staff as that of Karachaganak Petroleum Operating BV interested in complying with safe working standards?

- "Working on any hydrocarbon field requires special care and unique skills. Moreover the equipment at the Karachaganak field is very costly. Therefore, we require qualified and professional staff. We recognise that our main asset human capital. KPO supports and provides a highly productive culture, but responsibility for compliance with environmental standards and safety regulations rests with each member of the company. Promoting an accident free work place is absolutely necessary."



is to protect the air, soil, water resources, and flora and fauna of the Karachaganak Field. In September of last year, KPO obtained external certification in compliance with the international ISO 14001 Environmental Management System standard."

"The strategic plan for reducing the industrial impact of exploration was made in accordance with modern requirements. The development of the field is being carried out taking into account the government's plans. Social harmony will be achieved by making Kazakhstan one of the 50 most competitive countries, and the oil and gas industry plays a significant role in achieving this."

"KPO has developed a programme for sustainable development, which includes the implementation of social projects, enhancing the capacity of local staff and contractor companies, and the ongoing improvement of environmental performance."

"KPO has achieved a great deal in terms of promoting a safety culture and in 2008 this was recognised at the Forum of Leaders in Industrial Safety held in Geneva. KPO was awarded the DuPont Safety Award for Performance Improvement. It was awarded in recognition of an improvement of working conditions and a reduction of injuries in the workplace. It should be noted that KPO was among some 34 international companies nominated for the awards."

"We have also recently celebrated some 20 million man hours without a lost time injury. This is a significant achievement and is testament to the work which we have put into our safety performance over the past three years. In addition to promoting safety in the workplace, KPO also promotes safety throughout the community. Our Community Road Safety Programme is a good example of this."

Rig 216 team is true to itself

In December 2008, KPO drilling rig 216 and its crew celebrated an outstanding safety achievement – six years without a Lost Time Incident (LTI).

Saipar drilling rig 216 started its operations at Karachaganak field in 2001 and is a heavy capacity rig and which has successfully drilled nine deep wells within the field.

On the occasion of this significant event, the production site of the rig was visited by KPO Corporate Safety Manager Wayne Johnson, Well Operations Manager Andy Swale and other senior managers of KPO to congratulate the crew and to present them and all rig service personnel with a Certificate of Merit in recognition of Health, Safety and Environmental performance.

The Saipar well operations team is mainly of Kazakh origin. Over 90% of the operations team are Kazakh employees and most supervisory and technical positions are filled by Kazakhstan nationals.

The newspaper "Karachaganak News" congratulates the management and staff of Saipar, their contractors and the KPO team, on this excellent achievement.

Drilling rig 216 team

