

HOUSE OF CULTURE REFURBISHED IN ZHARSUAT VILLAGE

On the eve of Independence Day and the New Year, residents of Zharsuat village have received one more excellent gift from KPO. On December 14 an opening ceremony of House of Culture took place in this village. Refurbishment of the building was implemented in the framework of annual social programme of KPO.

That day Akim of Burlinsky district Sagynbek Mutashev and representatives of KPO led by General Director Paolo Campelli and Corporate Affairs and HSE Controller Nurzhan Kamalov arrived in the village to celebrate this event together with village dwellers.

After the opening ceremony, the honorary guests were offered to become acquainted with the refurbished building. The guests also attended a concert programme with the participation of village artists.

The reconstruction of the two-storied building of the House of Culture was implemented by a contractor "Zhaikselstroy" the Uralsk based company. The construction works started in June 2004 and were completed in late October. During the reconstruction, the water supply, heating and sewerage systems were fully repaired. In addition, sound equipment was installed in the hall.

It is necessary to note that in the beginning of the school year KPO fully refurbished a school in Zharsuat that was built in 1964 and was never refurbished since then.

KPO COMPLETES RECONSTRUCTION OF CARDIOLOGICAL CENTRE IN URALSK

Karachaganak Petroleum Operating B.V. (KPO) has announced completion of the reconstruction of the Regional Cardiological Centre which can cater for 109 patients. Total investment in the development, which was implemented as part of the KPO social programme, came to over one million dollars.

Attending the ceremony to commemorate the opening of the centre were WKO Akim Nurgaly Ashimov, WKO Deputy Akim Stanislav Kachalo, Chief of the Regional Health Department Beket Murzakhmetov, KPO senior management and representatives from contractors and the medical and business communities of Uralsk.

WKO Akim Nurgaly Ashimov said: "Today's event is significant because cardiovascular diseases remain prevalent and dangerous. I believe that thanks to this centre, Uralsk cardiologists will now be able to increase the efficiency of their work which is aimed at protecting the health of the region's population".

KPO Operations Director Cameron Crawford said: "The successful completion of the reconstruction demonstrates KPO's commitment towards social infrastructure development in Western Kazakhstan, and we are pleased that the residents of the region will now be able to receive qualified treatment at this state-of-the art medical centre".

The project's engineering design was carried out by design institute Gaszhobalau, and the general contractor that won the tender and carried out the construction was UralskStroyInvest, LLP. The reconstruction was completed two months ahead of schedule. Between May and October the interior and exterior finish for three buildings at the centre was carried out, three elevators were installed and the water supply and sewer systems were upgraded. To ensure a stable supply of electric power, a back-up diesel power station was built and the power supply system was fully replaced. In addition, an upgrade of the fire protection system included works on the fire water tank and pump station.

KPO invests \$10 million annually towards social infrastructure projects in Western Kazakhstan, which include the construction of roads, hospitals, schools and other social facilities.

AGIP KCO TRAINEES ENGAGE IN INTERNSHIPS AT KPO

According to a preliminary agreement between KPO and Agip KCO, young trainees for Agip KCO did practical work from August of the past year at all production operation sites of KPO including KPC, Unit 2 and Unit 3, and at the export pipeline, Karachaganak-Bolshoy Chagan-Atyrau, built by KPO for the transportation of Karachaganak oil, connecting with the CPC oil pipeline system in Atyrau.

The main goal of the practical work was to give young workers an opportunity to become qualified specialists; KPO professionals share their rich experience and theoretical knowledge in production. A total of 240 people served in a study internship and all the participants were divided into 12 groups. Each group, consisting of 20 people was sent to Karachaganak for one week.

Included in the group of Agip KCO interns were future ecologists, economists, operators and electricians. Experienced KPO instructors, including Edward Challinor, Gabriel Matei, Mladin Vasile and Lyubica Ristik, accompanied each group.

After the internship David Foster, the head of KPO Training Centre awarded a certificate to each intern.

KAZMUNAYGAS – BUILDING THE FUTURE, REMEMBERING THE PAST

The KazMunayGas OJSC National Company is a young and ambitious enterprise, an undoubted leader in the oil and gas market of Kazakhstan.

Along with projects in which the company is the sole subsoil user, KMG also has a share in joint operations in Kazakhstan. Today, KMG extracts approximately 25% of all oil in Kazakhstan, conducts 80% of oil transportation through trunk pipelines, as well as 100% of gas and 100% of tanker transportation.

KMG makes bold plans and establishes serious goals for which the company possesses all the necessary technical, organisational and human potential for implementation.

KMG's main goal is oil extraction and step-by-step increases in volume. In 2003, KMG extracted over 28 million tons of hydrocarbon crude. In 2004, this indicator is expected to increase.

During the international KIOGE-2004 exhibition held in October 2004 in Almaty, KMG and Italian Eni signed a memorandum of understanding. This document defined the main principles for mutually profitable cooperation in the area of the creation of a first order of objects of coastal infrastructure for the support of offshore petroleum operations in the Kazakhstani sector of the Caspian.

Today, the oil sector is undergoing unprecedented growth and this is not only related to high oil prices. Above all, large-scale one-of-a-kind projects are currently underway. The second stage of the Karachaganak project is almost complete, as well as the implementation of the Tengiz second-generation project. KMG places most of its hopes on the development of the largest fields – Tengiz, Karachaganak and Kashagan, and the exploitation of the Kazakhstan sector of the Caspian. The Kashagan field alone has the promise to attract USD 57 B in FDI.

KMG has a special role in its operation at the Caspian. It is expected that with the new projects, the company will have not less than a 50% share. The state has entrusted the company to represent its interests in all projects with foreign participation, either as a holder of state shares or as a governmental plenipotentiary authority in production sharing agreements.

The Caspian Sea attracts the attention of the world largest oil and gas companies. The reserves of the Kazakhstani sector, according to forecasts, total 15 B tons of conditional fuel. Under the government program for the development of the Caspian shelf, the company is implementing several important projects together with Russian companies, including LUKoil, one of the world largest companies at Khvalynskoye, Tyub-Karagan and Atash, as well as with Rosneft at Kurmangazy. KMG and its

companies alone for the first time are conducting active exploration at the Southern Zhambay-Southern Zaburun's sector. The company's priority is an observance of environmental safety during production. The essential ecological principles of KMG and its partners meet international standards. Another priority is the sale of oil and petroleum products on the domestic and international markets. The KMG's principal route for the transportation of crude oil abroad is the trunk pipeline from Western Kazakhstan through the Russian Federation, then to Ukraine, to the shipping terminal at the Odessa port and then further to the countries of Western Europe across the Black Sea and the Mediterranean.

Recently, the company engaged in a strategic project between Kazakhstan and China on the transportation of hydrocarbons for the growing needs of the southern partner. The launch of the Atasu-Alashankou pipeline is planned for the late 2005, early 2006. The Chinese National Petroleum Company (CNPC) and KMG signed an agreement on the chief principles for cooperation in the construction of the pipeline. The two parties created a joint venture, the Kazakhstan Chinese Pipeline JV for ordering the construction and will serve as its operator.

KMG is one of the most significant taxpayers in Kazakhstan. Moreover, KMG implements a large social program aimed at the solution of regional problems, where the company operates and also assists the development of Astana. Over the last year, the company built the two residential areas in Ak Bulak, a medical centre, the Caspiy sport and entertainment centre, as well as a kindergarten in the capital. An important role of KMG in the social sphere is also the constant improvement of living conditions for oil workers.

In spring 2004, the scientific research expedition – "the Caspian, Oil and Culture" took place. The company provided financial and organisational support for the expedition, and made an adequate contribution to the implementation of the state cultural heritage program.

KMG pays a great deal of attention to the preparation of professionals. The Kazakhstan British Technical University – an affiliate of KMG holdings, educates world-class specialists to occupy positions in major offshore petroleum operations projects.

According to the First Vice President of the company, Timur Kulibayev, "KMG has been called in to assist in the national social and economic development and its successful integration into the world economy".

(Editor Note, KMG press service materials were used for the article)

FIELD OPERATIONS PERFORMANCE WORKSHOP

By the end of the new year Field Operations held its first of two Performance Workshops. You may ask why hold a workshop to talk about performance? What the senior management team have recognised is that now we have moved from a project to fully integrated oil & gas producing field there is a requirement for Field Operations to develop into a more performance orientated team if it is to be successful in delivering the Department's challenging 2005 targets and beyond.

The purpose of the Workshop was to bring together a selection of staff from across the whole of the Department to give them the opportunity to understand what the challenges we face together in 2005, and more importantly what we have to do together to deliver those challenges on behalf of the Venture.

The importance of the Workshop was highlighted with Cameron Crawford Operations Director giving up his time to actively participate in the various working group sessions planned throughout the day. The day commenced with the Field Manager opening up the Workshop providing the projected year end budgetary and volume statistics. This was closely followed by the targets for 2005 set for the venture by the JOC that will finally cascade down to Field Operations.

The workshop attendees were then set the challenge for the day by the Field Manager "If this were your Company how would you measure your performance"? With that the workshop formed into there work groups and "got into action" to develop their Key Performance Indicators (KPI's).

Though the "brainstorming" session was a little slow at first due to the fact that the group participants wanted to discuss in depth any idea before putting onto the board, they soon got the idea that no matter what they said it went up onto the board, however after a little time suggestions/ideas were coming quicker than they could be written up!

Once the list was complete the groups reviewed and identified those KPI's that would be successful in measuring their performance and in specific key areas of their work. The various groups then carried out "challenge and review" sessions on each other's selected KPI's ensuring that the KPI's selected would measure the right indicators to support the delivery of the department's performance targets.

Even though the groups had worked hard throughout the

morning this was not the end of the workshop. With energy levels high the groups moved onto the 2nd phase of the workshop developing Business Improvement Plans (BIP's).

After a brief presentation on why we have BIP's there purpose in complementing the KPI's and how they fit within the Performance framework they groups moved into the 2nd "Getting into Action" session. This session was about developing their BIP's that would provide a detail plan of action or actions required to deliver their selected KPI's with the groups asking themselves "what steps, changes or things do we need to do to deliver the KPI's". Just like the morning the group went through "brainstorming", "ranking of ideas" into group "challenge and review" sessions. With the final product of 2 or 3 BIP's in draft form that will be further developed at the next performance workshop scheduled for the 19th December. By the end of the workshop there was an air of tiredness due to the effort and energy levels used up throughout the day.

Speaking to two of the participants about their thoughts on the workshop their comments were positive; Julia Demitryuk from Contract Admin commented that; "even though at first it was difficult to understand the process, but once the ideas started to be "bounced around" and people saw that they made a contribution the workshop got really interesting. Also having done the session in the morning the afternoon session was much easier knowing the process. My overall opinion was that great! It involved people and got a nucleus of understanding"

These positive comments were further echoed by Tyulegan Bissaliev Waste Management Superintendent: "The workshop was helpful to local people to understand how important if one day of production is lost. First time for nationals to get involved with team building event and for them to be coached as a member of the team and not just a worker. We need more team building events and to feel our shoulders, standing together."

With the positive comments about the day you could sense at the end of the workshop that there was an understanding that everyone throughout the department "makes a difference" and has an important role to play in delivering Field Operations performance in 2005.

It was recognised that Field Operations Management team had taken its first step on the journey to becoming a performance focused business.

EDITORIAL

Karachaganak News editorial office would like to thank everybody who took part in newspaper's issue by assisting us with data collection. Karachaganak News works in cooperation with KPO's public affairs department. We offer you the most recent and precise information on events of Karachaganak, KPO's new projects and company's contribution in social and economic development of the region.

KPO's management and personnel, companies-founders of KPO and other organizations we work with as well as people of neighboring villages take a favorable view of Karachaganak News. It is obvious that such information bulletin is wanted and we will do our best to make it even more informative and interesting.

We would appreciate if you keep assisting us on newspaper's issue. It is quite possible that you know something interesting related to the development of the field or to the KPO's activity that you would like to see on the pages of the newspaper. Please contact Askar Tapalov at phone 8 571 222 2658 or email Tapala@kpo.kz

KPO NEWS

On the eve of Independence Day of Kazakhstan and the New Year, KPO completed the reconstruction of 2-storeyed Cultural Centre in Zharsuat village.

KPO has held a charity action for 84 orphans in Burlinsky district by transferring 420 thousand tenge to purchase winter clothing. KPO has also held a New Year party for the orphans and presented them New Year gifts.

In the framework of its social programme, Karachaganak Petroleum Operating B.V. completed the construction of the oblast cardiology centre in Uralsk. The sum of investments into the reconstruction of the 109-bed centre was over USD 1 MM.

The public youth organisation, Tarlan in Aksai received financial assistance from KPO for the realisation of a number of programmes and initiatives aimed at providing support to rural and urban youth living in the Burlinsk District in the West Kazakhstan Oblast.

According to a preliminary agreement between the two companies, young interns at Agip KCO have completed their induction training at KPO production sites, including the KPC, Unit-2, Unit-3, as well as the Export Pipeline Karachaganak-Bolshoy Chagan-Atyrau.

In order to support the RK state programme for providing support to talented young people, KPO sponsored the Aksai special school for gifted children, Daryn to create a logistical base necessary for successful training and pedagogical process.

On the eve of the New Year, KPO provided material assistance to the Uralsk kindergarten No. 9, Erkemay for purchasing furniture, toys, and everyday things for the children.

KPO and the Women's Union of the Ural Region announced the successful completion of a joint project, which allowed 20 unemployed women of Western Kazakhstan to undergo small business and entrepreneurship training. (See details in this issue)

KPO BBS IN ACTION

Behavioural Based Safety (BBS) programme was introduced in KPO one year ago. As was previously reported, this major project aimed at enhancing safety efficiency by way of a new approach to safety control. BBS is based on a combination of existing control, reporting and safety engineering analysis techniques, and implies implementing some of new concepts of safe behaviour under the guidance of the BBS Control Committee. At present BBS is being

successfully used by KPO employees and one can see the positive results of this programme. BBS Observer Nurlan Bazarbaev from KPC Warehouse was doing a planned observation on lifting operations involving pipe stacking in the warehouse yard. He noticed a problem with the crane rope. Nurlan immediately advised the HSE Technician, Zhanur Nurgaliev and they then together investigated and stopped the work. The rollers on the feed to the rope drum were not turning,

resulting in the rope being bent and abraded. The crane was withdrawn from service and repaired preventing a possible incident with a dropped load. The root cause of the incident was inadequate preventive maintenance.

Nurlan and Zhanur were praised and thanked by Mimmo Li Puma, KPC Warehouse Superintendent and received a Safety gift voucher for \$100. Both of them were congratulated for their pro-active attitude towards safety and for contributing so enthusiastically to the BBS Programme. The programme has only recently been introduced to the KPC Warehouse and already Observers have

completed more than 10 observations.

BBS observers of the KPC Warehouse Marat Kaposhev and Nikolai Vinnik also actively take part in the planned observations. More than once they reported about violations of safety measures to Ziadash Markabaeva, Technician of KPC Warehouse. Thus, it allows to take urgent measures to prevent accidents.

In 2004 planned observations under the BBS programme identified a total of 733 unsafe behaviours that could have lead to an accident or incident.

KPO'S ENVIRONMENTAL ACTIVITIES: POSITIVE DIMENSIONS

During the recent years KPO B.V. Environmental Department has been concentrating efforts on improving management of the company's nature conservation activities. Currently, KPO has a well-functioning monitoring system to track air, water, and soil quality in and around the Karachaganak field, including surrounding villages.

To implement such an extensive in-house monitoring programme, KPO has contracted Gidromet Ltd., a specialised laboratory, which is the only one registered with the National Standards System of the Republic of Kazakhstan and certified as required by ISO 9000.

The in-house monitoring system covers a wide spectrum of activities related to assessing the quality of environmental media by regularly sampling air and surface and ground water. Air samples are taken daily along 8 compass points at the sanitary protective zone (SPZ) (buffer zone) boundary and in the surrounding villages. Laboratory tests of the samples firmly evidence that pollutant concentrations at the SPZ boundary do not exceed MPC's. To appreciate the scope of monitoring, we can say that the quantity of air samples alone analysed annually by the contracted laboratory is over 100,000.

KPO Public Relations Department runs monthly publications in the local newspapers of air quality data for the surrounding villages giving an opportunity for every villager to have first-hand information on the air they breathe.

To supplement the contracted laboratory data, KPO has installed the Environmental Monitoring Stations (EMS), which – upon their certification – will allow the company to get real-time information on the ambient air quality at the Karachaganak Field. Moreover, the EMS's are equipped with meteorological sensors tracking weather conditions. In addition to the EMS's, the company uses a mobile environmental monitoring laboratory to capture downwind air parameters.

KPO actively implements activities related to Environmental Protection as per the annual Environmental Protective Measures Plan approved by the Environment Manager and reviewed and agreed by the West Kazakhstan Oblast Environmental Protection Department.

More than 32 million dollars were spent in 2003 alone, including 11 million dollars invested in the air protection measures and 17 million dollars in waste management measures.

The construction of Waste Management Complex (WMC) is one of the significant measures to fulfil requirements of EPMP's Section "Industrial and Consumption Waste Management". The Liquid Mud Plant has been built and commissioned. Operation of the plant enables to reduce the volume of liquid waste disposed in the environment due to the cleaning and reconditioning of drilling mud and brine after workover and reusing them again.

The introduction of advanced technologies in hydrocarbon production at Karachaganak field has allowed achieving the major success in minimization of environmental pollution. Thus, for instance, use of the Super Green Burner has allowed soot free burning of gas condensate during well testing flaring. This has allowed reducing soot emissions by 0.002 kg per 1 kg of the hydrocarbons flared. Commissioning of the 4th flash gas compressor at Unit 3 has allowed

recycling of up to 97% of flash gas to the process by compression

instead of gas flaring. Use of flow lines during MPLT test has enabled to reduce volumes of the hydrocarbon flared up to 50%.

According to the Tree Planting Programme, 22.8 hectares of the Karachaganak field area was planted with trees and shrubs. Tree planting and tree maintenance activities are ongoing this year to create a protective forest belt around the field. Treated sanitary wastewater is reused for the tree irrigation.

KPO pays a careful attention to flora and fauna conditions within Karachaganak field and along the KPC-Bolshoi Chagan-Atyrau Export Pipeline. Highly qualified specialists are involved in research activities; for the most part, Candidates and Doctors of Science in Biology are among them.

According to the field study results, 7 exotic species of plants listed in the Red Data Book of the Republic of Kazakhstan and 18 exotic and endangered species of birds were found in the Karachaganak field area. Special posters appealing to proceed with caution and observe safety practice while working, were installed by scientists of the Centre of Remote Sensing and Geoinformation Systems "Terra" LLP in the habitat areas of these species of plants and animals.

Also it is planned to conduct an introductory training course for employees working in the field to prevent any impact upon habitats of flora and fauna representatives.

In addition to the In-House Environmental Monitoring, radiation monitoring and seismic monitoring are being conducted at Karachaganak field. Radiation monitoring is being carried out by the RoK NNC, Aksai Branch. Hydrocarbons (condensate), processing equipment, production facilities, ground, industrial waste, vegetation and water bodies are subject to radiation monitoring. During several past years radiation situation at Karachaganak field is safe and stable.

The RoK Seismic Institute is involved to conduct seismic monitoring in Karachaganak field. The readings of special instruments installed at seismic stations near Karachaganak field are being recorded and reported on a daily basis.

Currently, the Geographic Information System (GIS) containing a large map database of satellite images of high resolution and environmental monitoring database is being introduced by the environmental monitoring team. The satellite images based GIS is one of the latest achievements of science related to the remote environmental monitoring. Further development of GIS System will allow addressing industrial ecology issues and minimizing the impact on the environment.

Certification of operation of the main production facilities at Karachaganak field (Unit-2, Unit-3) in compliance with the requirements of ISO 14001-1996 "Environmental Management System" is one of the KPO's key priorities.

It should be emphasized that the Company's management gives strong consideration to the nationalization policy issues (Kazakh employees content). Even now, the senior position in KPO's management, i.e. Corporate Affairs & HSE Controller, is held by Nurzhan Kamalov, Kazakhstan citizen. Environment and Safety specialists improve their qualification in research institutions and training centres of the Republic of Kazakhstan, CIS and abroad.

REVIVING THE LAND

Beginning from 1999, KPO and Uralsk scientists conducted joint intensive scientific research on the rehabilitation of complete fertility of the soil in the Gryphon zone, which was so named following a large gas and mud discharge that occurred in 1987. The discharge resulted in the pollution of approximately 500 hectares of land that was later called the Gryphon zone. The specific characteristics of this area is that the fertile dark chestnut soil remains buried under a layer of lifeless alluvium with a thickness of up to 100 centimeters.

The rehabilitation of the affected soil requires not only a huge amount of work, but also represents a new area of technical knowledge, developing at the crux of biological, geological, agronomical and technical sciences.

The large-scale project for the study of the chemical, agrochemical and ecological condition of the affected zones was conducted through a joint effort, and on the basis of the research, fertility rehabilitation methods for these soils were developed, and the work has been begun on their practical implementation.

In 1999, laboratory researches was conducted by the West-Kazakhstan Agrarian University, and since 2000, the West-Kazakhstan State University (WKSU) has implemented field experiments. Traditional physical-chemical methods of treatment, thermal treatment, cleaning with chemicals widely used for the elimination of hazardous pollution bubbles are destructive for agro-ecosystems as well as extremely expensive, and create new

waste. The new waste requires disposal, reduces soil fertility or makes it useless for agricultural purposes. This is why a fundamental study on the influence of complex agro-technical and phytoreclamation techniques on the fertility of the polluted land was taken as a baseline. During 2000-2003, field tests were conducted with various salt-resistant cultures, various kinds of treatment were studied, methods of earthing were studied, and various doses and combinations of organic-mineral fertilizers and phosphogypsum were tested. The main purpose of the long-term complex studies was not only to cleanse the alluvia of pollutants, but also to create a new fertile layer of the buried soils.

On the basis of a summary of the long-term experimental data from field and industrial tests, the stage-by-stage project for treating contaminated soils was developed.

In 2004, upon assignment by KPO, the West Kazakhstan M. Utemisov State University began the practical implementation of the biological rehabilitation project at the Gryphon zone on a 17 hectares area. Then the changes really begun, and now some 12 hectares of lifeless land are covered with thick vegetation. These events led to an overgrowth of natural flora on the marginal section of the Gryphon zone, an area of about 10 hectares. One can say with assurance that the landscape of the Karachaganak deposit is gradually improving thanks to efforts on the part of KPO.

Editor's note, the editorial board of the newspaper expresses its gratitude to Director of the innovative-technological centre of WKSU, Professor S.S. Dzhubaturova, for the assistance in writing the article.