

C&MD HSEAWARD 2010



13th Year
1st June 2010



Speech of the Sponsor
Chairman & Managing Director
Mr. Sami F. Al-Rushaid
1st June, 2010

Ladies and gentlemen,

I would like to welcome you all on this momentous occasion, which is held annually to honor a number of colleagues who have implemented initiatives which have had a great impact on the improvement of HSE in KOC.

For 13 years in a row, we have gathered to celebrate this award, which gains in importance year after year. The result is that each and every one of you is exerting efforts to enrich HSE practice in your daily life, both professionally and socially.

We at KOC regard HSE regulations and procedures as an essential component of our business. As such, we put great emphasis on this issue, and are keen that our employees meticulously implement this component.

In reality, talk of safety regulations is no longer a theoretical discussion, but rather part of any project that seeks the highest standards of excellence. The issue at stake is not restricted to a set of regulations, but goes far beyond that to the perpetuation of the concept in the conscience of each and every individual.

I would like to give you a few examples of achievements in the area of HSE:

- Reduction of flaring by 2.6 % across the Company, which is below the target of 3.1%.
- Completion of projects aimed at modernizing production facilities, including the reinforcement of security and safety systems with control and supervision systems that can increase efficiency and mitigate incidents in addition to enhancing the Company's ability to tackle emergency cases.
- The signing an agreement with Kuwait EPA for monitoring air quality which will contribute toward curbing pollution and addressing any potential negative impacts on the air quality.
- The launch of initiatives aimed at curbing incidents, such as the zero-fatalities campaign, which studies each incident in order to determine cause and to take proper measures to prevent recurrence.
- The organization of proactive campaigns to alter behavior, such as the defensive driving campaign which seeks to change driver behavior thereby reducing the number of motor vehicle accidents.
- The expansion of the HSE system to include contractors who provide services and execute



projects for the Company. In addition, various HSE systems have been incorporated in tenders and contracts, and the extent to which a contractor is committed to KOC's HSE is used as a gauge to assess contractor performance. Regular meetings are held with contractors to reinforce cooperation in this area and share best practices.

- Inspection visits to see whether HSE systems are being consistently and regularly applied.
- Organization of a conference and exhibition to discuss the negative repercussions the State of Kuwait is currently facing, with the aim of adopting the most optimal means of treating contaminated soil and oil lakes.

These successes would not have been possible had it not been for the efforts of the Company employees and its contractors, as well as other public and private institutions.

In conclusion, I would like to take this opportunity to thank every employee who has contributed toward the success of this award program. And a special thanks to the winners, all of whom have played an essential role in providing assistance to the Company to achieve its HSE goals.

A good evening to all of you! Thank you.



Speech of the Committee Chairman Manager Health, Safety & Environment Group **Mr. Mohammad Al-Fodari** 1st June, 2010

Mr. Chairman, DMDs , Managers, Team Leaders, our partners, contractors, youth and children.

I welcome you to the 13th year of the Chairman's HSE Award.

This year we have received the highest number of applications ever with 243, covering the categories of health, safety, environment and awareness.

KOC continues to be committed to providing a safe working environment for both employees and contractors. As an example, this past year KOC implemented a program of regular site verification visits conducted by senior management and all circular appointed employees to ensure that all safety measures are implemented and contractual clauses are adhered to by both KOC staff and contractors.

Also, protection of the environment wherever we at KOC operate is reflected in two major programs, namely the SEED program and the clean-up of oil lakes.

As part of KOC's sustainable development and social responsibility focus, the Company signed a partnership agreement with KEPA for the review of present regulations and the establishment of an industry-related regulation and air monitoring program to improve air quality in southern part of Kuwait.

We all know that accidents are preventable, but continue to occur whenever barriers and controls fails. The Company and our contractors must share the responsibility, and we intend to reduce the number of incidents through monitoring performance in order to ensure compliance with all regulations.

This year we have honored VIP Guests that we intend to recognize. They are:

Dr. Salah Al-Mudhi, General Manager of KEPA, for his role in the KEPA and KOC partnership agreement.

Dr. Reda Al-Hassan, KNFP Project Program Manager, for his role in coordination with KOC for the remediation of oil lakes and contaminated areas.

Dr. Sami Al-Yacob , Environmental Consultant to UNDP and KEPA , for his valuable role in the development of partnerships and his continued support.

I would also like to express my appreciation to the Main Committee Members and Sub-Committee Members.

But most of all, I would thank you all for your contributions, which have made this event a successful one.

Main Committee Members

Mr. Shaker Faras, Mr. Abdulla Al-Sumaiti, Mr. Abdul Khaleq Al-Ali, Mr. Mustafa Bu-Megdad, Mr. Adnan Al-Aradi, Mr. Fadhel Boresle, Mr. Dhari Gharabally, Mr. Mohd. Al-Aslawi

Sub-Committee Members

Dr. Omar Al-Booz, Mr. Ahmad Abbas, Mr. Abdulla Abdul Salam, Mr. Fares Al-Mansouri, Mr. Ismael Mataqi



Members of C&MD HSE Awards Committee 2010



Mr. Mohammad Al-Fodari
Manager
(Health, Safety & Environment)



Mr. Abdul Khaleq Al-Ali
Manager
(Public Relations & Information)



Mr. Shaker Faras
Manager Operations
(South Kuwait)



Mr. Mustafa Bu Megdad
Manager
(Ahmadi Services)



Mr. Fadhel Boursesli
Manager
(Export & Marine Operation Group)



Mr. Abdulla Al-Sumaiti
Manager Operations
(West Kuwait)



Mr. Dhari H. Gharabally
Team Leader
(Health & Environment)



Mr. Adnan Al-Aradi
Manager
(Major Projects II)



SUPREME WINNERS

Transfer of excess LP gas from GC 27 to BS 170



Ali Hussain Al-Kandari, Abdullah Mohammed Al-Harbi, Omar Ali Sadeq, Manea Al-Otaibi, Abdullah Al-Ajmi

Increased LP Gas production at GC-27 was overloading the LP compressors resulting in Gas flaring. However it was found that BS-170 was having spare LP compression capacity of 10 MMSCFD. So a proposal was initiated to divert the LP Gas from GC-27 to BS-170 through the unused existing 24" crude trunk line. Suitable Jump-over to interconnect both facilities with necessary instrumentation & protection systems were considered.

The initiative was implemented, tested and commissioned in June'09 which has enabled to achieve the following

- Enhanced Gas Exporting capability by (10-12) MMSCFD
- Reduced flaring by about 3.5 %
- Improved HSE performance.

The modifications were done in-house resulting in significant cost & time saving.



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WINNERS HEALTH



Major Joint Replacement Surgeries at Ahmadi Hospital



Dr. Essam Zaher, Dr. Faisal Al- Kandary, Ghezail Dhidhan, Sahar Othman, Amani A. Yacoub

All patients who needed either hip or knee joint replacements were sent abroad & each case cost around \$ 100,000 plus other travel expenses. I have introduced these surgeries to Ahmadi hospital using the most advanced techniques which saved the company over 15 million U.S. dollars over the last three years. Compared to international results, ours are excellent with zero infection rates.



WINNERS HEALTH

Stress Management at work place among Kuwait Oil Sector employees



Dr. Khalid Elias Khudadah, Dr. Hussain Haji Ali, Dr. Rima Ahmad Al-Adsani

Job stress is a subject of growing concern in the occupational safety and health field, as it results when there is a poor match between job demands and the capabilities, resources, or needs of workers. Stress-related disorders encompass a broad array of conditions, including psychological disorders, emotional strains, maladaptive behaviors, and cognitive impairment, were these conditions may lead to poor work performance and even injury. Oil production industry is well recognized as a stressful occupation, numerous stressors include adverse physical environment, exposure to chemicals and machines hazards, all exert an adverse effect on the health and safety.

The presented study showed indirect relationship of occupational stress with employment grade, age, income, qualifications, the number of working years, and positively associated with the number of working hours per week and the number of sickness absentee's days. It was lower among workers who reported job satisfaction and higher among those who work in a shift duty system, and it was also directly related with the use of hazardous chemicals or machines. Moreover, job stress level was positively correlated with anxiety, depression and total emotional distress. Our study identified various important sources for the management of work stress among oil workers. Based on the study findings, different strategies and methods could be targeted to different occupational groups of oil workers with different socio-demographic characteristics and work-related conditions, highlighting the importance of social support in the reduction of work stress. There is a need for organizing training workshops to educate the workers about the hazards of chemicals and machines, with recommendation to adjust work conditions to workers' abilities and capabilities, we also propose more effective preventive measures in particular among those workers who are exposed to hazardous chemicals and machines. The whole project was supported by our CEO and KOC Chairman/MD for its practical application among our employees.



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WINNERS HEALTH

The Development of the KOC Health Risk Register Document



Ahmed A. Abbas, Ali Abdul M. Hussain, Mohsen Al-Mutairi, Dr. Hemant D. Kshirsagar, Dewan Ahsan Kabir

The Health Risk Register identifies, evaluates and controls workplace health hazards in a systematic way. It illustrates the range of occupational health problems that can occur in relation to various types of exposure in the workplace (e.g. chemical agents, biological issues, ergonomic issues etc). Through extensive workshops and site visits across the company, the Health Risk Register was developed. The Document addresses Health Hazards and their Risk Ratings as well as controls covering all areas and activities of KOC's operations and supporting divisions. The Health Risk Register will serve a basis for all KOC Assets to evaluate their existing controls by internal audits and be able to suggest additional controls that may be required.



WINNERS SAFETY

Major Roads Safety Modifications at various locations in KOC Field areas Roads



Ahmad Al-Kandari, Hashim Al-Sayed, Hamad Al-Ajmi

Following Top Management's directives, Utilities Team Fields Area has carried out significant improvements for KOC Field Area Roads Network which are in summary as follows:

- 31.5 km of old roads at NK & WK Fields was reconstructed / widened to meet the international standard , widening from (6) to minimum (12) meter .
- Converting the old (9 m) narrow UM Al-Aish Camp road into 4 lanes 6.5 KM in length new dual carriageway road with 20 m width cross section & 2 meter tiled median.
- Construction of 6 km new asphalt roads for Sabriyah Oil field from old GC-24 to Bahra check point. Removing the old dangerous oily road.
- Reconstructed & upgrading of Roundabout & all junction at NK Area with Introducing New Roundabout at the old dangerous "T" Junction near Gc23 & 24 NK Area.
- Constructed 3 new Car parking facilities and improved 2 other car park facilities.

These modification & Enhancement works have resulted in:

(i) Increased Road Stability, (ii) Increased Safe Driving Conditions, (iii) Reduction in dangerous turning condition and removal of danger spots, (iv) Increased Aesthetic Conditions, and (v) Increased Efficiency in Vehicular Movement.



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WINNERS SAFETY



Enhanced Asset Integrity Management Implementation



Bader Al- Qaoud, Farid Jafarov, Haytham Al-Habshi, Majeed Al-Muwail, Jose Aurelio Decena

Integrity Management (IM) is the programmatic implementation of activities necessary to ensure that important equipment will be suitable for its intended application throughout the life of an operation. Gas Development Group specific IM KPIs consist of 11 elements that cover certain activities to ensure:

- Improved facility and equipment reliability throughout effective material selection and corrosion management program
- Reduction in equipment failures that lead to safety and environmental incidents
- Improved product consistency
- Improved maintenance consistency and efficiency
- Reduction of unplanned maintenance time and costs
- Reduced operating costs
- Improved contractor performance
- Compliance with KOC and international standards

Successful implementation of GDG IM KPIs started in March 2009 and considerable progress so far has been done.



WINNERS SAFETY

Electronic Work Permit System (eWP)



Hesham A. Al-Nouri, Ali Hasan Al-Failakawi, Mohammad Alam Aftab, Safa Eissa Al-Nashmi, Ahmed Hajieh Hasan

Electronic work permit (eWP) is a web-based solution used through KOC intranet to replace the existing paper based process. This package allows Permits-to-Work to be produced quickly and accurately according to KOC HSEMS Procedures. eWP helps in identifying the potential hazards, and provides sufficient information on preventive & protective measures to be taken.

All these features in the Electronic work permit system help us towards implementation of KOC HSE Management System in our day to day activities and thereby improve our overall HSE performance. All efforts have been made to keep the system simple, convenient and user friendly keeping in view the roles & responsibilities of personnel associated with permit to work.



Re- Positioning of Fusible Type Heat Sensor to Mitigate False Fire ESD by Root Cause Analysis (Process Risk Management)



Adnan Al-Adwani, Ibrahim Abdul Salam, Fahad Al-Ghanem, Sivadas T. N.

Team Goal

GOT(S&EK) Asset team initiated Process Risk management through BAD ACTOR identification and implemented to identify all invisible risks and treat the risks prior to influence major damage on the Assets and to meet Asset Integrity.

Guidelines

This specific approach is in line with KOC Enterprise Risk Management goals and KOC HSEMS requirements as per KOC.SA.018.

A specific Case study mentioned below

The fusible type heat sensors are installed around critical areas of Booster Stations where potential danger of fire may exist. The outdoor heat detecting system is provided with fusible type heat sensors and have a temperature rating of 217 Deg F. The sensors are connected into Instrument Air header downstream of 30 psig with pressure regulating valve.

On 27/09/09 @ 09:40 hrs BS-140 TR-I got tripped due to Fire emergency around K-101 & K-102. Subsequent field investigation revealed that fusible type heat sensor installed near the coupling end of Gas Compressor got melted and ESD action initiated. However there were no signs of any fire that could have caused the melting of the fusible plug.

In-house Process Risk Management identified as a Bad Actor to Asset and conducted RCA. RCA committee came up with short term & Long term recommendations to mitigate the unexpected ESD actions by re-positioning the Fusible plug from the heat radiation Zone and as a long term to replace all insulating panels on combustion exhaust plenum area. This is completed and the same transferring to other trains. In addition to the above Long term action plan is underway for complete elimination of the Hazards from the facility.



WINNERS ENVIRONMENT

Use of Formate Drill-In Fluid System in Drilling RA-286, 6" hole



Bader A. Al-Khayyat, Dakhil Al-Enezi, Amalendu Debroy, Aghore Bhattacharya, VNR Prasad

Formate mud system is very environment friendly compared to the currently used oil base mud system. The Formate mud is biodegradable and possess biocidal (can kill micro-organism) property. This makes it easy to reuse and dispose off without harming the environment. Additionally, the toxicity of Formates is generally very low, both to mammalian and aquatic species, thus enabling environmentally benign fluids to be formulated for use in environmentally sensitive areas. The system was tried successfully on RA-286 while drilling 6" hole.



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WINNERS ENVIRONMENT

To Divert off-spec condensate from BS-131 to GC-15 during shutdown of GC-25



Abdulla Al-Qadeeri, Tushar Das, Faisal Soud Al-Odaila, Hamad Fadhel Rajab, Anilkumar Koothoor

Off spec condensate is diverted to GC-15 from BS-131 during the planned shutdown of GC-25 (planned for 42 days) with a proposed modification. Since there was no such line exists for diverting off spec condensate to GC-15, it was required a modification with upstream control and safe flow to the separator. An idle control valve was used for back pressure control and a redundant flow line RA-21C was used for minimized material cost for the required modifications.

With this modification about 1500-2000 BPD of off-spec condensate was recovered in GC-15 from BS-131 during the shutdown period of GC-25 and capable to reprocess 4000-5000 BPD during the summer season due to any shutdown in GC-25. More importantly without this facility, off spec condensate will have to divert to burn pit (flare) thus resulting negative impact on environment.



WINNERS ENVIRONMENT

Medical Waste Management System



Sarjoun Bou Hamdan, Mohammed Hassan Ahmad, Fatma Abu Merci, Khader Hamdan, Sayed Ishaq

A waste management system which treat medical hazardous wastes by shredding, sterilizing under high pressure & temperature with compacting them to 20% of its original size. Final output is only water vapor & normal harmless wastes which can be transferred by municipality car. Previously, we used to transfer medical wastes to a dumping site & costs more money on the long run. Incineration was done on the early years of the hospital which caused harmful fumes for the neighboring houses.



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WINNERS & AWARENESS

KOC Well Surveillance Group Defensive Driving Awareness Program



Saeed Al- Shaheen, Falah Saleh Al-Omair, Menwer Al-Shammari, Riyad Quttainah, Ibrahim El- Mahdy

Driving is still one of our main important risks which we are facing while moving around for our normal life or even in the field, that's why Defensive Driving awareness program was one of our group main concern.

Well Surveillances Group Defensive Driving awareness program is a program for all group employees as well as group business partners employees to help ensure that all parties concerned are aware of driving hazards, their roles and responsibilities, also to help in building up HSE culture among all of them supporting KOC HSE MS implementation success.

This Driving Awareness program started by training requirement analysis which depended on the oilfield industry known hazards, Field visits, accident reviews and the HSE training survey, then the program set an approved and agreed on procedure, training materials (slides, Videos (special Defensive Driving DVD with messages from KOC leaders) & practical sessions) record keeping tools and reviewing matrix.

Well Surveillances Group Defensive Driving awareness program using latest updated technology such as Seat Belt Convincer, Rollover Simulator and virtual Driving Simulator Machines.



WINNERS AWARENESS

Awareness Drive By HSE WK: A Step Towards Building A Safe And Sustainable Work Environment



Ismail Y Mataqi, Yousef E Al-Qallaf, Bala Siva Srikanth Adivi, Sanjay Jaiswal, Debasish Kakoty

Recognizing the importance of imparting HSE awareness to KOC, Contractors' employees as well as to the community so that they can play their respective roles in day-to-day business and operational activities safely and more effectively, HSE (WK) took the significant steps viz. imparting HSE Awareness to around 1850 personnel on various HSE topics, published a Bi-annual HSE Newsletter "Focus", commissioned Plasma Screen with continuous display of HSE information at operational facilities at West Kuwait fields and published key HSE messages through KOC Postmasters, flyers, stickers, posters, etc. This HSE Awareness drive has not only helped in enhancing awareness among employees, also helped in enhanced HSE Performance of the WK fields.



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WINNERS



CHILDREN



Name: **Roshan Abdullah**
Age: 5 Years



Name: **Aheli Gupta**
Age: 11 Years



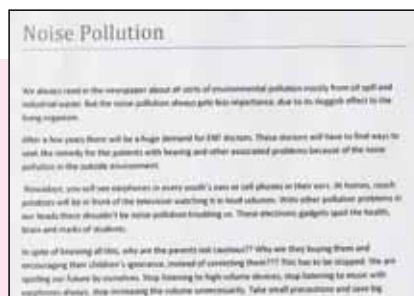
Name: **Ibrahim Abdullah Al-Amer**
Age: 9 Years



YOUTH



Name: **Sindus Hussain**
Age: 14 Years



Name: **Aratrika Sanyal**
Age: 14 Years



Name: **Abdul Aziz W. Al-Tarrawa**
Age: 14 Years





WINNERS

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CONTRACTORS

Western Geco

Halliburton

Weatherford

BEST DRIVERS

WINNERS	DESIGNATION
Falah Saleh Othman Al-Omair	Team Leader Artificial Lift
Mohammed Khalifa Ahmed Al-Abdul Jalil	Team Leader (Operational Planning)
Nabil Abdul Rahman Al-Kharji	Team Leader Compensation
A. M. Manowar Ahmedmonaemuddin	TPL Specialist I (Geology)
Mohammed Hamed Mohammed Shareff	Snr. Geophysicist
Shiraz Gulam Abbas Hassan Ali	Snr. Engineer Planning



STATISTICS 2010

KOC Employees

The total number of application received	243
The total number of wining applications	13
The number of winning groups	13

Contractors

Number of nominations	28
Number of groups which submitted nominations	13

Youth & Children

The Total number of the youth entries	53
The Total number of the children entries	116

Winning Groups

GROUP	No. of employees
Medical Group	12
HSE Group	6
Gas Development Group	5
Gas Management Group	5
Deep Drilling Group	5
Well Surveillance Group	5
Operations Group (North Kuwait)	5
Support Services Group (West Kuwait)	5
Ahmadi Services	4
Corporate Information Technology Group	3
Operations Group (West Kuwait)	3
Operations Support	1
Operations Group (East Kuwait)	1