Galfar Health & Safety Newsletter

JANUARY 2016

Don't Fall Short of Safe

Gas testing for confined space

Exercises for Flat Abs and Trim Hips

Health Benefit of Drinking Lemon Water

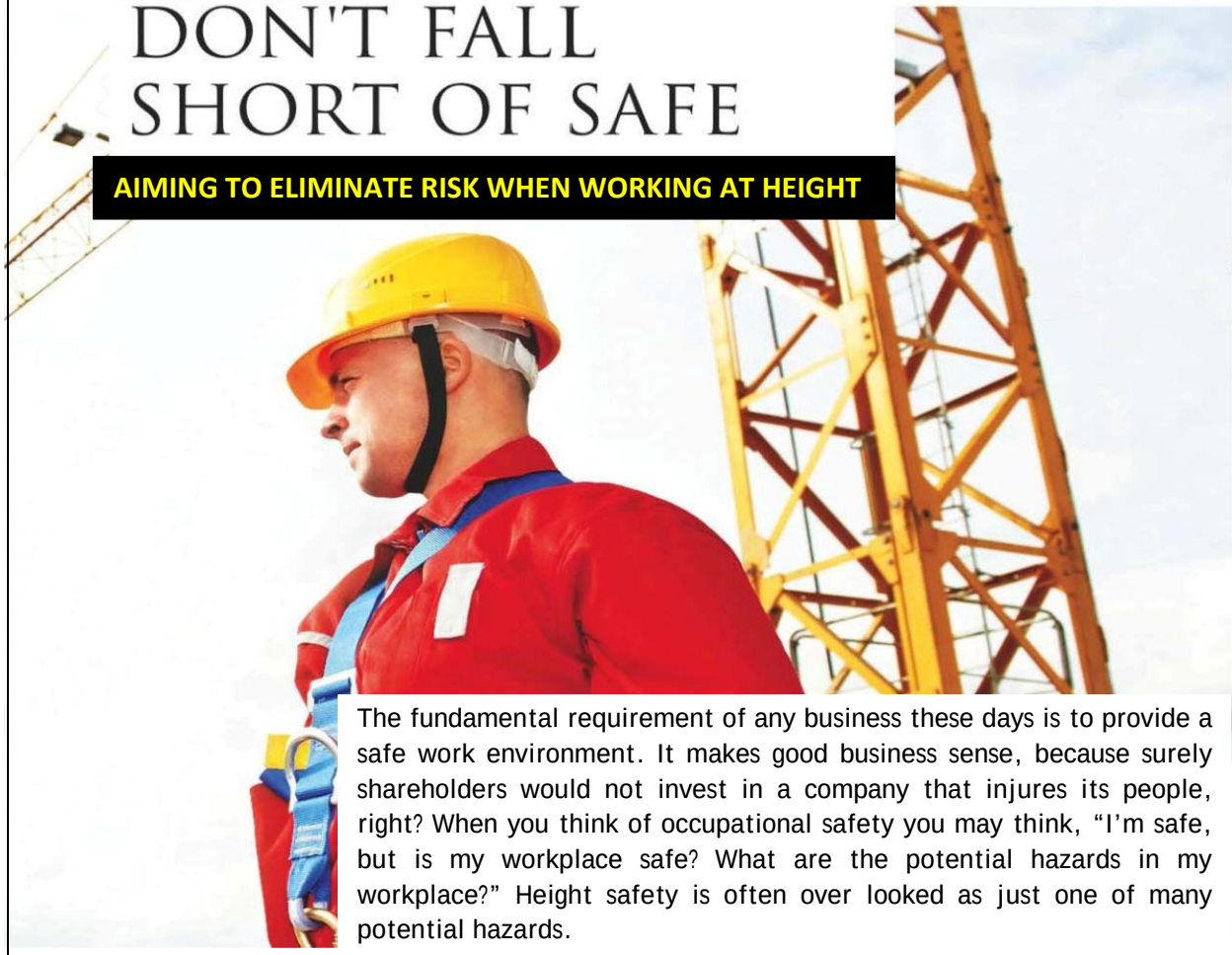
HSE Statistics

HSE Quiz & Slogan

Safety Awards and Trainings

Safety Alert

Health & Safety Newsletter



AIMING TO ELIMINATE RISK WHEN WORKING AT HEIGHT

The fundamental requirement of any business these days is to provide a safe work environment. It makes good business sense, because surely shareholders would not invest in a company that injures its people, right? When you think of occupational safety you may think, "I'm safe, but is my workplace safe? What are the potential hazards in my workplace?" Height safety is often over looked as just one of many potential hazards.

From climbing ladders and stairs to tripping on a step or falling into a ditch, height safety covers any height, however small and insignificant it may seem. If there are potential height safety hazards in your workplace, they can be grouped into the following three categories:

- Falls from height – a fall from one level to another
- Falls into a depth – falling into a hole
- Slips, trips and falls – falls on the same level

Height safety may be a potential hazard in your workplace and so a holistic approach should be taken, from the initial inception of a design, the development of construction and the operability phase, through to the decommissioning stages at the end of a life cycle. In all of the areas previously mentioned, forethought must be given to the end user at every stage for a safe system of work to be implemented.

Where there is a risk of falling, employers must protect workers by providing:

- ✓ A safe system of work, such as anti fall equipment and devices
- ✓ A safe means of entering and leaving the area in which employees are required to work
- ✓ Guard rails, covers, fender boards or other forms of safeguarding workers at height
- ✓ Personal protective equipment (PPE)

In analysing a productive and safe system of work programme for height safety, there are two key objectives to reflect upon: the 'safe place', and the 'safe person'. From the 'safe place' objective there are two essential areas which relate directly to place and plant – these are substitution and engineering/isolation.

Substitution and engineering/isolation are more significant in increasing effectiveness and sustainability on the hierarchy of risk controls when compared with place and plant, where an increase in participation and supervision is required and almost leans towards behavioural based safety, where the 'safe person' is involved. In organisations bound by safety rules and guided by polices and procedures, effective use of protection such as PPE is implemented, which relies heavily on the 'safe person' doing the right thing.

This can include, for example, a worker clipping onto a static line when working at a height where they may be exposed to an edge. This is used to prevent the person from going over the edge, and is more commonly known as fall restraint. If the person was to wear a harness for the same activity, but to prevent a fall of more than two metres, then this may be considered as fall prevention.

On the contrary, if the lanyard is three metres in length and longer than the fall height of two metres, this will make wearing the harness unnecessary and defeat the purpose. In the event of a fall the person will hit the ground. Another issue occurring in a fall from height is known as the 'pendulum' effect, where the person falls and swings from side to side.

These four elements are paramount when working at any height in the context of fall prevention. Some examples of working at height activities may include working on building roofs and using mechanical intervention to reach a certain height; for instance, by using elevated work platforms like scissor lifts and knuckle or boom lifts.

Other height access equipment such as scaffolding is built to gain temporary access at height, with the most common equipment used for height work being a platform or step ladder. Conversely, falls into a depth, such as work in the construction and excavation industries, are often caused by trenches or holes that are hazardous if left unprotected. Falls into lift shafts, sewers, wells, tanks and stairwells are examples of falls into a depth.

Signs should be used to warn anyone on the site that there is a hole underneath, and that the cover should not be removed. Covers should be securely fixed and marked in clear lettering:

DO NOT REMOVE - HOLE UNDERNEATH

As with all types of equipment used for height safety, it must be fit for purpose. Workers must ensure they are competent in using the required tool, plant or equipment to prevent falls. Where that is not practicable, fall restraint or fall arrest devices may be used, but only as the last resort. Overall, the best outcome for height safety is adopting the hierarchy of risk control approach, namely, aiming for elimination.

This is where a working at height activity can instead be completed at ground level; for example, a roof being constructed on the floor and craned into place.

Pre-checks

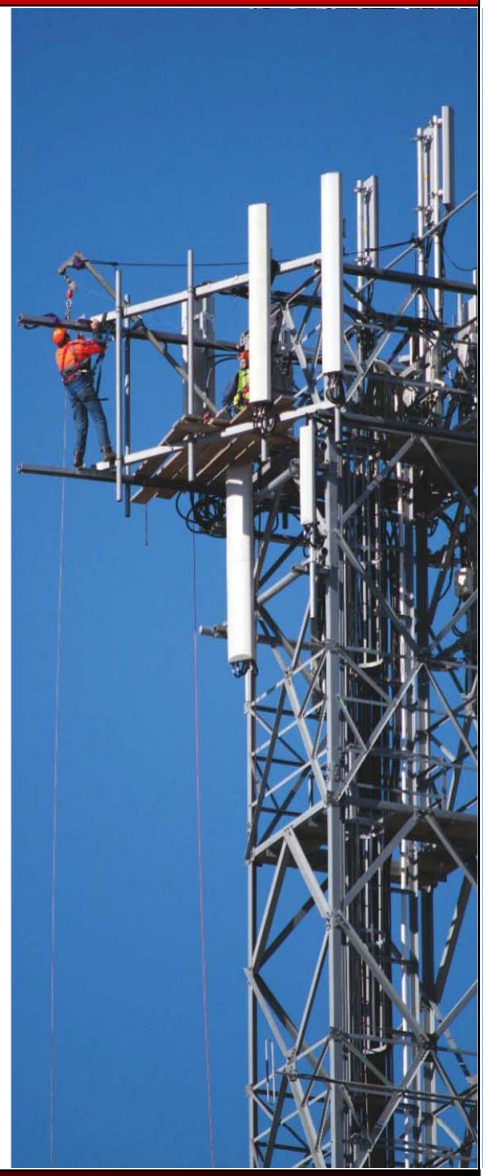
Before any height work occurs it is proactive to assess the scope of the works, by job walking and inspecting the work area for potential hazards, not only working at height issues, but secondary risk factors as well. If you use a mobile crane to lift a man box into position, the mobile crane may create a traffic hazard. When assessing the workplace, the area or location of the activity, such as where to safely position the crane, is an important element to consider. Another key factor is the safe access and egress of walkways, including pedestrian pathways and workways for heavy vehicles and mobile plants around the work site.

Regarding primary risk factors, fall prevention strategies including constructing roof guarding, installing anchor points or placing static lines at the top of the building structures ensure safe rope access for people working at height.

Roof work

Many falls from and through roofs occur during maintenance, renovation and cleaning work. Roof edges should be guarded to prevent falls due to overbalancing.

Some materials used on roofs can become fragile or brittle after being exposed to the elements. Serious injuries and fatalities have occurred when workers have fallen through roofs made of brittle materials such as asbestos cement sheets, translucent plastic sheets and glass skylights. Safety in this regard should be simple – you must not stand on or walk across a roof made of fragile materials. Work on fragile material must be done from a scaffold or other working platform. This must be done even if mesh has been installed. To ensure people are aware of the hazard, the following notice should be displayed:



Health & Safety Newsletter

DANGER FRAGILE ROOFING USE WORKING PLATFORM

The use of protective wire mesh is compulsory for roofs made of brittle materials and is also recommended during the construction of metal roofs. Protective wire mesh protects workers from falls during roof construction and provides protection for future work activities on the roof. Before working on brittle roofs, the wire mesh and sheeting must be checked to see if it is safe to use. In addition to the use of steel mesh, harnesses, nets and guard rails will also restrain a fall.

Anchorage points must be routinely inspected and placed above an area where works are being done. If the load bearing point is impaired, either remove it or otherwise place a danger tag on it and notify a supervisor or delegated management representative.

Plant safety

Another key element when assessing height safety is plant. Typically, plant and equipment may involve the use of mechanical devices such as elevated work platforms. Such items of plant are commonly referred to as scissor lifts, boom lifts and knuckle lifts.

The purpose of the relevant plant and equipment used to reach a nominated height is to make the height easily accessible, while ensuring safe containment within the cabin area by restricting the movement, or reach envelope of a person. Any movement or body part outside the perimeter area of the restricted barriers, such as leaning outside or persons standing on mid rails, is not the intended purpose for which working at heights plant and equipment was specifically designed, and is considered unsafe.

Plant height safety considerations extend to the safe use of scaffolds, in particular the erection, alteration or dismantling of temporary structures that are specifically erected to support platforms higher than three metres. Items of plant and equipment should be inspected regularly.

People who erect and install scaffolds are responsible for ensuring that the scaffolding is safe and won't endanger anyone if it is used according to safety instructions.

Mobile scaffolds

Mobile scaffolds are often hired and used by finishing tradespeople such as painters and plasterers. Mobile scaffolds are easy to put up, use and take down, but are safe only if they are erected by a person who knows what they are doing. Supervision should be provided on any site to make sure that scaffolding is erected properly with the correct guard rails.

Guard rails can prevent falls from a working platform. Common problems occur with mobile scaffolding when:

- ✓ There is not enough training, supervision or instruction in erecting or using a scaffold
- ✓ Riding on a mobile scaffold while it is being moved
- ✓ Wheels are not locked when the scaffold is stationary
- ✓ Access ladders are not placed on the inside of the scaffold

Mobile scaffolds can be easily overturned because they are light. Climbing on the outside of a mobile scaffold can cause it to overturn. Instructions on the safe assembly of a mobile scaffold are available from the supplier. These instructions are also displayed on most mobile scaffolds as a sticker. It is very important that these instructions are followed.

To avoid hazards related to working at height, be mindful of:

- ✓ Tying off tools with lanyards
- ✓ Constructing toe boards so tools do not fall
- ✓ Installing barricades to prevent people walking into the line of falling objects
- ✓ Displaying signage at access and egress points to alert personnel of work being conducted above

As part of a height safety risk management strategy, thought should be given to the adoption and practise of an emergency rescue plan. A working at height checklist should also be completed to assist in the identification and control of hazards and risks associated with working at heights.

All scaffolds should be erected by a competent person who has completed an industry recognised training course. Persons erecting scaffolds should use a fall prevention system in situations above two metres, where it is not possible to maintain three points of contact with the scaffold, such as when using two hands to perform work.

Incomplete scaffolds should have barriers erected on the access points and 'Out of Service' tags should be placed on each such barrier.

Persons working from scaffold platforms should not leave the confines of the platform edge protection without a fall arrest system.

Mobile scaffolds may be used where it is not practicable or economical to use fixed scaffolding, or as determined by the risk assessment. A mobile scaffold height is restricted to nine metres and the height must not be more than three times the least base dimension.

Mobile scaffolding should be used when:

- ✓ There is a requirement for regular movement of the working platform
- ✓ The supporting surfaces are hard and level
- ✓ Stationary and the castors or wheels are locked

Only a specially authorised person with an advanced scaffolding certificate (or equivalent) should erect suspended scaffolds.

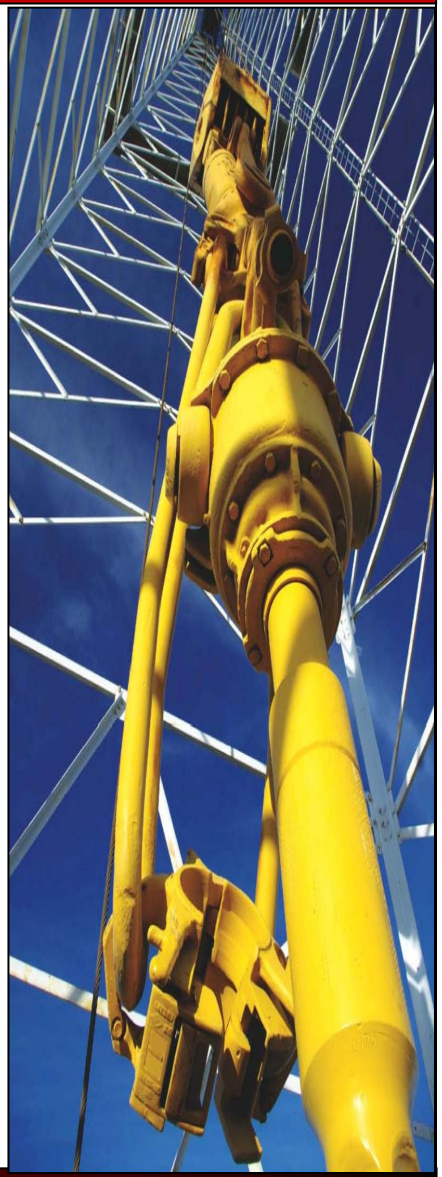
When using any working at heights plant there are a number of activities that should be completed to determine potential hazards. Check the plant log book for the condition of the item, as previous use may require maintenance to check and verify that the plant and equipment are fit for purpose. Prior to using the plant and equipment, the manufacturer's instruction manual should be read to ensure correct use. This may also include reading a plant risk assessment to ascertain all risk controls have been safely implemented and the person using the plant feels it is safe to proceed.

The next activity may involve consultation with the work crews and supervisors. This is to ensure the process is being followed correctly, such as using safe systems of work that may examine management plans and risk registers, as well as following site operating work instructions and procedures. If all personnel involved in the height work have completed a safe work method statement, risk assessed the working at heights activities and planned the work correctly, they will be able to work the plan correctly.

The human factor

The next key aspect examines the 'people' element. Workers must be appropriately trained in working at heights activities. Additionally, if using height safety equipment then employees must be competent in erecting and dismantling the scaffolding. For those workers using PPE, fall arrest devices should only be enabled when fall prevention cannot be achieved. Also, rescue equipment must be readily available when a fall arrest device is used, which may include first aid.

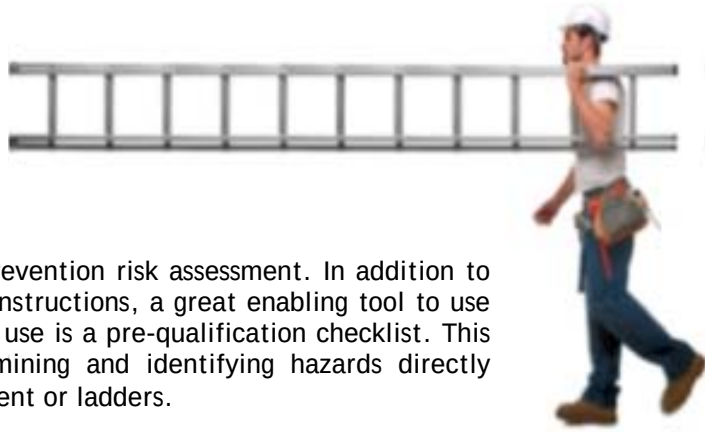
To prevent material and items of plant and equipment from falling, other materials can also be utilised such as catch nets, blankets and tool lanyards. Consideration of adopting PPE must also ensure that training in selection and assembly when using arrest devices will be adhered to, as per manufacturers' specifications. A visual inspection check is also warranted to check for any wear and tear, cuts or abrasions that may reduce the quality of the product. Moreover, to ensure the safe system of work is adhered to, managers must reinforce awareness and check training records to ensure personnel are competent to perform work at height activities.



Protection is the last element that involves the function of the 'safe person'. The fall protection equipment must be tested and certified for use, continually maintained and inspected before use. Conversely, any material used for work at height that is neither satisfactory nor fit for purpose should be destroyed. This is of particular importance following a fall, excessive wear and tear or mechanical malfunction.

If there is a person ascending to or descending from height, there must also be a rescue plan included. This should be practised before working at height. The testing of emergency procedures ensures that any life threatening injuries can be dealt with effectively and efficiently. The rescue plan should enable the person to be removed from the suspended position as quickly as possible to prevent the fallen person developing suspension trauma.

Ladders



The most common equipment used to work at height is the ladder. A planned pre-start check of the equipment is required to ascertain its fitness for purpose.

This is conducted by completing a fall prevention risk assessment. In addition to following manufacturers' guidelines and instructions, a great enabling tool to use in deciding whether equipment is safe to use is a pre-qualification checklist. This outlines what to use and when, determining and identifying hazards directly related to height safety for plant, equipment or ladders.

In some cases where fixed ladders extend more than two metres in height from the ground, ladder cages have been installed to prevent persons from losing balance and falling backwards. Alternatively, if mobile and fixed ladders are used these should be checked and inspected regularly as part of a maintenance regime.

Platform ladders are commonly used in construction for most trades such as mechanical fitters and electricians. These also need to be inspected regularly, before and after use.

The available studies exploring the risk factors implicated in ladder fall incidents focus largely on Swedish and American data. Hakkinen et al (1988), estimate that ladders are involved in one or two percent of all occupational injuries in industrialised countries. In a regional study of falls based on Swedish hospital data, Bjornstig and Johnsson (1992) reported that 32% of the cases were work related (Field et al, 2000).

An adequate ladder inspection checklist provides early hazard identification and can be utilised as an administrative risk control.

These controls may include:

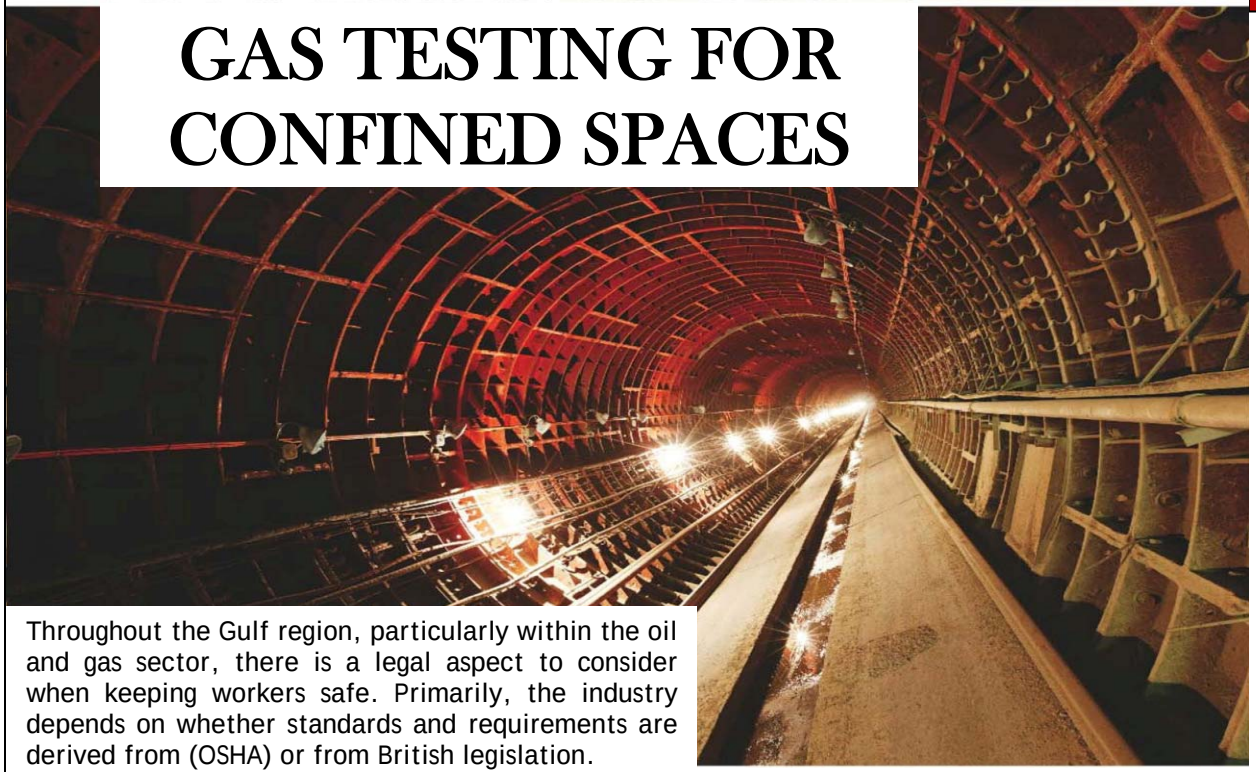
- ✓ Inspecting the ladder for defects before use
- ✓ Following manufacturer's guidelines for inspection
- ✓ Removing ladders with structural defects
- ✓ Keeping ladders secured and barricaded
- ✓ Storing ladders in a rack or chain to wall so that they cannot fall
- ✓ Inspecting ladders immediately after tip or fall

Conclusion

In summation, adopt the hierarchy of risk control for height safety. This is the first protocol of engagement when planning any work at height. Ensure you can eliminate the hazard by:

- ✓ Completing the task at hand on the ground or on a solid construction
- ✓ Using a passive fall prevention device, e.g. a temporary work platform
- ✓ Using a work positioning system, e.g. travel restraint system
- ✓ Using a fall injury prevention system, e.g. harness and lanyard
- ✓ Using a ladder or administrative controls

GAS TESTING FOR CONFINED SPACES



Throughout the Gulf region, particularly within the oil and gas sector, there is a legal aspect to consider when keeping workers safe. Primarily, the industry depends on whether standards and requirements are derived from (OSHA) or from British legislation.

Depending on which standards are utilised, this will determine the process of incorporation into that country's own health and safety regime and the legal or moral requirements imposed.

In all honesty, it shouldn't matter. The principle objectives of both sets of legislation are the safety of the individual, and protection of the asset and the environment.

OSHA legislation OSHA 29CFR 1910.146 is primarily a standard, developed to define work plans for confined space entry, while the UK legislation, The Confined Spaces Regulations 1997 applies where the assessment identifies risks of serious injury from work in confined spaces. It also introduces specific duties to ensure safety – for example avoid entry; follow a safe system of work if entry is unavoidable; and have emergency plans in place before work starts.

The common theme is the plan and system of work aspect, which is the key concept for this paper – particularly the importance of the gas test in confined space entry.

Understanding confined spaces

When we think of a confined space, places that come to mind include a chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or other similar space. According to The Confined Space Regulations 1997, a confined space can be any place in which, by virtue of its enclosed nature, there arises a reasonably foreseeable specified risk.

The OSHA definition is any space that is large enough and configured so that an employee can bodily enter and perform assigned work, has limited or restricted means for entry or exit and is not designed for continuous employee occupancy. Already we begin to see that the interpretation is different and is dependent on the legislation followed.

Reasons to test for gases

Atmospheric monitoring is a process of obtaining air samples to determine conditions of the process parameters, either operable or non-operable. It also provides relevant information for any confined space entry team.

The correct method of undertaking the monitoring, using the relevant plant and equipment will provide knowledge to enable personnel to correctly and safely obtain the sample and analyse the results, providing a level of safety to people, the assets and the environment at all points in operations and entry.

What to check for

In confined spaces there are a number of atmospheres that are hazardous to health.

These are:

- Oxygen enriched
- Oxygen depleted
- Flammable, Toxic, which includes H2S.

Gas properties and structure

Gas is a state of matter, in which particles do not have either a defined volume or shape. As a structure, gas has no order, its particles are arranged at random and they are so far apart that there is a force of attraction. The particles of gas are unaware of each other's existence unless they collide.

Gas will fill its entire container, which is a major issue when entering into a confined space, although it is easily compressed. As the temperature increases, so too do the energy and speed of the particles, which in turn results in pressure increasing.

Reasons to test for gas

One obvious answer to this question is simple: the risk and the consequence. The risk is so great that it needs to be tested for, the consequences of not testing, potentially lethal.

Studies conducted by the National Institute for Occupational Safety and Health (NIOSH) between 1983 and 1989 reviewed confined space entry deaths. In analysing 88 deaths from 55 incidents, NIOSH found that only 27% had any safe system of work for entry, and only three had training. Furthermore, another OSHA study identified that of 188 fatalities in confined spaces between 1984 and 1986, 146 deaths were from oxygen deficient air and toxic gases.

For a ten year period (1980-1989) the National Traumatic Occupational Fatalities (NTOF) unit in the United States analysed confined space related deaths. This breakdown can be seen in Figure 1. NTOF also identified that many fatalities in confined spaces are rescuers.

Atmospheric monitoring is the first and most critical rule, as most fatalities in confined spaces are the result of atmospheric problems. Remember, your nose is not a gas detector. Some hazards may have characteristic odours, but others do not. It is important that any entry to a confined space, as previously determined, is structured under a system of work, namely a Permit to Work. Personnel should have knowledge of the space itself in order to determine the hazards associated with entry.

For any required confined space entry, it is important to identify the possible gas hazards that could be encountered.

OSHA states that in every case, before an employee enters a permit requiring confined space, "the internal atmosphere shall be tested with a calibrated direct reading instrument." This way it continues to determine the principle atmospheric conditions to be monitored.

Even when you can detect the presence of a hazard, you cannot determine the extent of that hazard. Some gases, such as hydrogen sulphide, can even temporarily deaden your sense of smell after short exposure. This deceives the worker into thinking the problem has gone away, when in fact all that went away was the ability to smell.

The only reliable method for accurate detection of atmospheric problems is instrument monitoring. Basic confined space atmospheric monitoring should include oxygen concentration and flammable gases and vapours.

Wherever you work in the world there may be regulatory limits, but such limits provide only minimal protection. Best practises dictate that any variation from normal, which is 20.9% oxygen and 0% lower explosive limit (LEL), should be investigated and corrected prior to entering the space. Elimination of the hazard is achieved, thus following the hierarchy of control principle and reducing levels of risk to as low as is reasonably practicable.

Toxic monitoring requires an evaluation of potential atmospheric contaminants before you even determine how the monitoring will be performed. Simply put, this means you must establish what you need to look for in order to determine what equipment to use.

The following digital instruments are available for common toxic contaminants:

- ✓ Electrochemical sensors measure carbon monoxide, hydrogen sulphide, sulphur dioxide, ammonia, chlorine, and other gases
- ✓ Infrared sensors measure carbon dioxide and several other gases
- ✓ Photo ionisation and flame ionisation detectors measure VOCs at the parts per million (ppm) level. This may be required if solvent vapours are present. These vapours will exceed the limits for inhalation long before they will be detected with most LEL meters
- ✓ Colourimetric tubes can be used to determine whether a toxic contaminant is present, in situations where no digital instrument is available

A thorough assessment of the atmospheric conditions in the space must be completed before entering the space, and should be continued during the entire entry.

Monitoring and testing processes

It is important to determine the three phases of monitoring the confined space:

- ✓ Prior to entry - externally
- ✓ Continuously - during entry
- ✓ Prior to any re-entry - externally

Prior to entry from an external point is critical, but how and where should we monitor within the space? That is an important aspect due to stratification, which means a state of many layers. Measurements should be taken from the top, middle and bottom of any confined space.

Measuring at three points within a confined space is critical. The stratification of confined spaces can be seen in Figure 2. Here, it is shown that methane is lighter than air, carbon monoxide is the same as air and hydrogen sulphide is heavier than air. This means that we must consider our breathing zones, and also liquids and sludges that may be present in the confined space environment.

Flammable vapour explosion

The following case study details an explosion that occurred at a chemical plant.

Hot work was being conducted on the Polyvinyl Fluoride (PVF) slurry tank farm, located adjacent to the manufacturing building. Contractors were tasked with repairing damaged agitator supports for slurry tanks numbered one to three, when the manufacturing process area was under a planned shutdown. Due to issues with procurement, however, the materials were not available to repair the third tank until after that period.

The manufacturing process was shut down on October 21, 2010, with slurry pumped out of the first two tanks. These tanks were then locked out by the maintenance team, cleaned and entered. Damage was identified on agitator supports following removal of a tank's insulation, and an engineer wrote a works order for the repair of the agitator supports, with a work scope generated by construction field engineers.

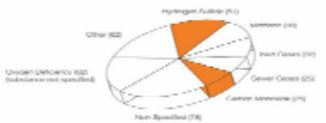
The valves of tank one's fill/discharge lines were then locked out, and following the site's lockout and hot work procedures the contractor performed the repairs on tank two on the same day, although he had to delay tank one's repairs because of a lack of materials.

During the internal inspection of tank two, engineers discovered a corroded seal loop on the flash tank overflow line and concluded the operation unlikely to impact on safety. This was because they did not know its actual purpose. The company determined that the repairs to tank one could be completed following a system restart later in the month.

On November 6, 2010, the manufacturing process was restarted, with the valves aligned to allow the flow to tank three, the equaliser line connected to all three of the slurry tanks. The line was not isolated or disconnected from tank one prior to the works. On November 8, 2010, the compressor within the manufacturing unit failed when the unit restarted without it, which had the effect of doubling the vapour present in the slurry flowing to the flash tank, and this mode of operation continued up to the time of the incident.

A permit to work (PTW) was in place on the day of the incident, with a lockout card completed for tank one. It indicated all five valves to and from the tank and the agitator motor were locked out, although it instructed the contractors to attempt a start of the motor before commencing work. Having no valves, the overflow line was not blanked or isolated. A hot work permit was completed, with contractors not checking valves. Gas testing was completed around the top of the slurry tanks. No flammables were present, and continuous gas monitoring was also conducted by a fixed

Figure 2. Measuring atmosphere in a confined space



4 Exercises for Flat Abs and Trim Hips

Truth be told, the hips are the anchor of the core. They not only add structure to the transverse abdominis—the muscle that acts as your body's girdle—but also support those hard-to-get-in-check lower belly muscles. That's why I like exercises that allow for "bolting," or stabilization of the hips. They help you win the battle of the bulge by creating a flat, toned stomach. (Word to the wise: You still have to watch what you eat.) Plus, building up those hips—a weak area for many women—will boost your overall power, mobility and stability. Your body will respond like crazy

Your hips don't lie; if they're weak, you'll have a saggy stomach—and be at risk for injuries. Firm them up with this sequence and you'll notice a stronger, flatter belly. Aim to do the exercises six days a week; remember to pair them with 30 to 60 minutes of cardio.

Inverted Knee to Open Diagonal

Start on all fours; drop left forearm to the floor. Lift right foot, with sole facing up, and turn knee in, swinging right foot out to the side (A). Then raise right leg up on a diagonal (B). Return to "A" and repeat 30 times.
Tip: Keep your foot in line with your knee.

Elbow Side Down Kicks

Start on all fours; drop left forearm to the floor. Lift right knee and rotate it inward (A). Extend right leg out to the side (B). Reach toes forward, coming as close to right hand as possible. Return to "A"; repeat 30 times.
Tip: You want your leg to be as low to the floor as possible.

High Attitude to Arabesque Kick

Start on all fours, then drop both elbows to the floor in front of you, right arm in front of left. Lift right leg up, bending knee so that shin is slightly angled to the left (A). Pulse leg up as you straighten it (B). Return to "A" and repeat 30 times.
Tip: Aim for a tight core.

Side Bounce Hip Sit to Open Diagonal

Start seated on left hip, with knees and hips stacked and left forearm and right hand on the floor (A). Press hips up, lower them back down and press them up again while rotating onto left knee; arms stay in position. Kick right leg back and up (B). Return to "A" and repeat 30 times.
Tip: Shoulders should be back.

14+ Health Benefits Of Drinking Lemon Water

Lemon water is a refreshing beverage, but it also offers an array of health benefits. Lemon contains a number of antioxidants and critical nutrients that your body requires for optimal vitality and health. A glass of lemon water first thing in the morning helps to wake you up and prepare you for the day. Understanding how lemon water can help you keeps you motivated to drink it regularly.

Vitamin C
Vitamin-C Lemons are a citrus fruit so they are packed with immune-healthy vitamin C. This vitamin helps to strengthen your immune system so that it is well-equipped to fight off illness. It reduces the frequency of illness by helping the body to fight bacteria and viruses.

Potassium
Potassium is a nutrient that plays a role in many body systems, including the central nervous system and the cardiovascular system. It helps to stop free radicals from doing damage, regulates your blood pressure and aids in cell formation. This electrolyte must be kept in good balance because if it gets too low or too high, you can experience significant health problems. This water can also help to boost your energy so you can maintain a healthy body.

Balancing pH
A major component of a healthy body is ensuring that the pH is in balance. If your body is to alkaline or too acidic, you will have problems. Lemon water helps your body to find and maintain the proper balance.

Cardiovascular Health
Cardio-healthYour cardiovascular system helps with everything from walking through your house to running to your car in the rain so you must keep it healthy. So you need to get regular cardiovascular exercise, but this water mixture can give you a boost. Lemon water's antioxidants help to fight free radicals and get toxins out of the body. The high potassium content also helps to relax the heart muscles, promoting a healthier heart.

Respiratory Health
Your lungs need to be healthy or else you can experience significant problems. If you have issues like asthma or something like mild bronchial issues, regular consumption of lemon water may help to promote better respiratory health.

Kidney Health
Your kidneys rely on regular filtration and urination to be at their best and this water happens to be a natural diuretic which helps to ensure regular urination. This gets waste materials and toxins flushed out of the body so that they do not have time to accumulate and cause any damage.

Helps Indigestion
Indigestion is incredibly uncomfortable and it can really dampen your day. A single glass of lemon water that consists of lukewarm water and the juice from a few lemons can help to reduce the bloating, stomachache and abdominal cramping. It helps to promote optimal digestion by stimulating digestive juice secretion.

Clear Skin
Clear skin exudes youth and health so you want to do everything you can to achieve and maintain it. This water mixture keeps skin radiant and clear by purging toxic materials from the blood. The skin on your face is rejuvenated from the inside out thanks to the high vitamin C content.

Anti-Aging
Getting older is inevitable, but this does not mean you have to settle for wrinkles and sagging skin. This water mixture helps to combat free radicals due to its high antioxidant content and the rich dose of vitamin C it contains. This water helps to repair skin cells that are damaged, as well as reduce blemishes, deep furrows, fine lines and wrinkles.

Prevents Acne and Skin Infections
Acne, blackheads and minor skin infections can kill your confidence so keeping these at bay is important. The astringent properties of lemon water can help to heal your skin from the inside out. When you first get up in the morning have a glass of lemon water on an empty stomach to reap the benefits.

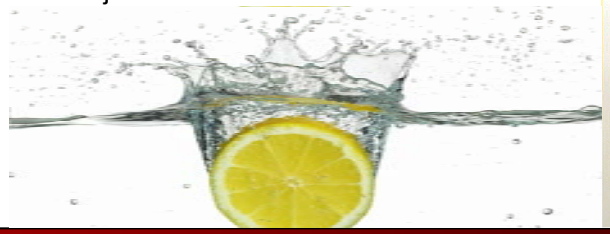
Stronger Hair
Strong hair is far more resilient to breakage and other damage, but keeping your hair in shape is no easy task. Lemon water can help a little bit because it helps to improve the strength of your hair at the follicles and roots. It also helps to promote new hair growth by acting as a stimulant for your hair follicles.

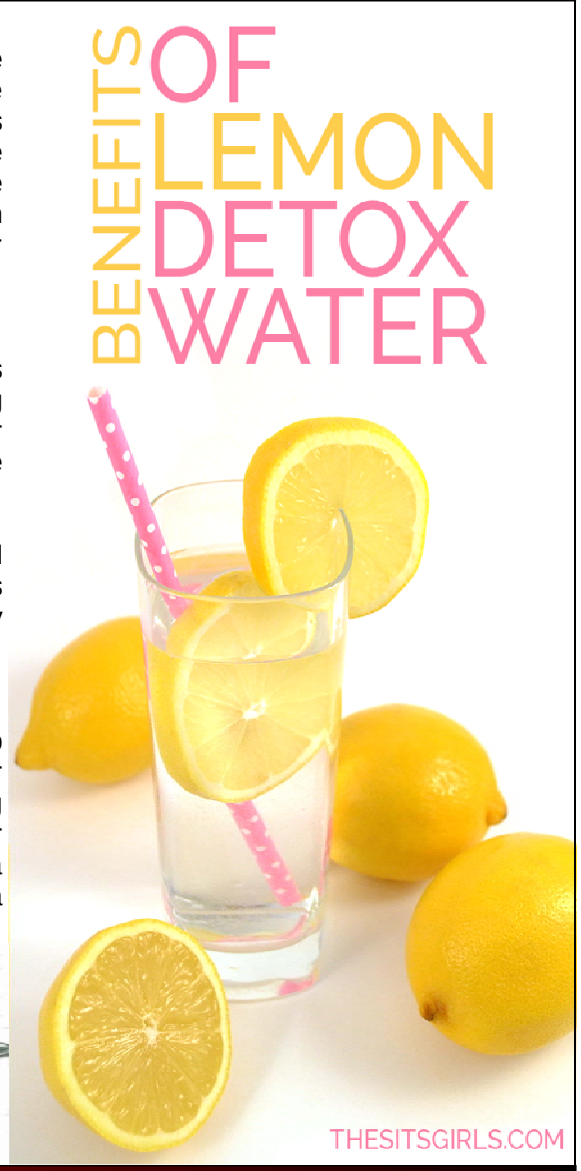
Cleaner Hair
Clean hair is important because your hair is one of the first things people notice when they see you. Lemon water has astringent properties which helps to reduce hair oiliness. This is due to this water helping to reduce how much oil the sebaceous glands on the scalp produce. When less oil is produced, the hair follicles are clear and your hair maintains cleanliness longer.

Healthy Scalp
When it comes to beautiful and strong hair, this starts at the scalp so you want to do everything possible to ensure optimal health. Regular consumption of lemon water helps to eliminate dandruff and alleviate scalp dryness.

This helps in two ways because it eliminates and irritant and by eliminating this irritant is makes you less likely to scratch and impair the integrity of the skin on your scalp.

Faster Illness Recovery
faster-illness-recoveryLemons work hard to help the body during times of illness and injury. For example, a mild gum bleed is helped by swishing lukewarm lemon water around in your mouth for about a minute. It can also help when you have a fever, throat infections that stem from bacteria or even just a basic sore throat.





HSE STATISTICS JANUARY 2016

No.	Performance Indicators	PROJECT 7067		
		Month	YTD-2016	PTD
1	Total number of employees	151		
2	Manhours worked	38,900	38,900	990,519
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	128	128	6763
9	Total Training Hours	174	174	8824
10	First Aid Cases	00	00	00
11	Near Misses	07	07	11
12	HSE Meetings	01	01	23
13	HSE Inspections	03	03	67
14	Emergency Exercises	00	00	12
15	Number of Vehicles	20		
16	Vehicle Kilometer Driven	59,730	59,730	2,504,752

No.	Performance Indicators	PROJECT 7069		
		Month	YTD-2016	PTD
1	Total number of employees	259		
2	Manhours worked	76,3871	76,387	1.268,653
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	127	127	3200
9	Total Training Hours(Average)	74.3	74.3	5274.3
10	First Aid Cases	00	00	00
11	Near Misses	02	02	128
12	HSE Meetings	02	02	48
13	HSE Inspections	02	02	65
14	Emergency Exercises	01	01	16
15	Number of Vehicles	53		
16	Vehicle Kilometer Driven	230,448	230,448	2,240,731

Health & Safety Newsletter

HSE STATISTICS JANUARY 2016

No.	Performance Indicators	PROEJCT 7070		
		Month	YTD-2015	PTD
1	Total number of employees	223		
2	Manhours worked	57,180	57,180	3,76,558
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	33	33	386
9	Total Training Hours	213	213	1527
10	First Aid Cases	01	01	01
11	Near Misses	01	01	01
12	HSE Meetings	01	01	12
13	HSE Inspections	17	17	39
14	Emergency Exercises	01	01	04
15	Number of Vehicles	39		
16	Vehicle Kilometer Driven	80,412	80,412	4,79,183

No.	Performance Indicators	PROJECT 7071		
		Month	YTD-2015	PTD
1	Total number of employees	228		
2	Manhours worked	61,904	61,904	1,020,599
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	163	163	1907
9	Total Training Hours	97	97	2662
10	First Aid Cases	00	00	00
11	Near Misses	03	03	58
12	HSE Meetings	02	02	32
13	HSE Inspections	04	04	78
14	Emergency Exercises	00	00	08
15	Number of Vehicles	40		
16	Vehicle Kilometer Driven	150,597	150,597	1,631,122

Health & Safety Newsletter

HSE STATISTICS JANUARY 2016

No.	Performance Indicators	PROJECT 7072		
		Month	YTD-2015	PTD
1	Total number of employees	218		
2	Manhours worked	54,820	54,820	2,23,630
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	26	26	329
9	Total Training Hours	78	78	1116
10	First Aid Cases	00	00	00
11	Near Misses	00	00	02
12	HSE Meetings	02	02	08
13	HSE Inspections	02	02	08
14	Emergency Exercises	00	00	02
15	Number of Vehicles	32		
16	Vehicle Kilometer Driven	62,802	62,802	3,14,957

No.	Performance Indicators	PROJECT 7074		
		Month	YTD-2015	PTD
1	Total number of employees	83		
2	Manhours worked	14,702	14,702	51,094
3	Fatalities (Death)	00	00	00
4	Fatal Accident Rate (FAR)	00	00	00
5	Permanent Total Disabilities	00	00	00
6	Permanent Partial Disabilities	00	00	00
7	Lost Workday Cases (LWDC)	00	00	00
8	Total Employees Trained	42	42	125
9	Total Training Hours	126	126	475
10	First Aid Cases	00	00	00
11	Near Misses	00	00	00
12	HSE Meetings	01	01	03
13	HSE Inspections	01	01	04
14	Emergency Exercises	00	00	00
15	Number of Vehicles	07		
16	Vehicle Kilometer Driven	20,386	20,386	56,524

ANSWER FOR DECEMBER 2015 SAFETY QUIZ

Q1) As you get older, you grow more bones in your back.
a) True b) False

Q2) Astronauts get taller in space.
a) True b) False

Q3) Which have the most neck bones?
a) Giraffes b) Humans c) Three-toed sloths

Q4) From the side, your spine looks most like what letter?
a) L b) I c) S

Q5) If you have a slipped disc, it has fallen out of place.
a) True b) False

Q6) Which sleeping position is best for your back?
a) On your back b) On your side c) On your stomach

Q7) A week of bed rest is best for a hurt back.
a) True b) False

Q8) Your wallet can be bad for your back.
a) True b) False

Q9) Only adults get back pain.
a) True b) False

Q 10)The higher the spinal cord injury, the more damage.
a) True b) False

QUIZ WINNER FOR DEC 2015

Mr.Shajahan
GEC No. 272115

Mr. Sheriff
GEC No. 275433

Galfar Health & Safety Newsletter

SAFETY QUIZ FOR JANUARY 2016

1. The digging depth at which trenching becomes a particular safety concern is:
   a. 5 feet b. 10 feet c. 15 feet

2. The two naturally occurring hazards that affect soil stability include:
   a. water & subsidence b. ice & subsidence c. amount & moisture of spoils

3. The average weight of one cubic yard of dirt is _____ pounds.
   a. 270 b. 2700 c. 62

4. Loss of soil stability is caused by:
   a. shielding b. water c. sloping

5. The angle of repose for average soil conditions is:
   a. 45 degrees b. 26 degrees c. 75 degrees

6. To safely get into and out of a sloped trench you should:
   a. be transported using a lift device b. climb a secured ladder
   c. rappel down the shoring

7. The large metal or wood box used in shielding is called:
   a. mule b. whaler c. spreader

8. The purpose of shielding is to:
   a. prevent cave-ins during trenching b. prevent water from entering the trench
   c. protect employees working in the trench

9. The shoring component used to provide support against the vertical and horizontal shoring members is:
   a. whaler b. mule c. spreader

10. To keep water out of the trench, install:
    a. plastic pipe to continuously drain the trench
    b. sheeting below the point water could enter the trench
    c. French drains at the bottom of the trench

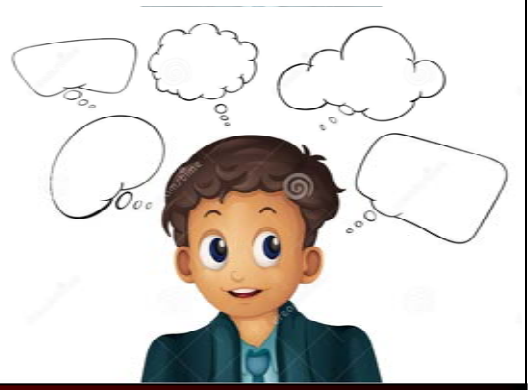
PICTURE OF THE MONTH

Send your Caption for Picture of the Month. We will select the Best Safety Caption and mention the name of the person in next month issue.

ratheeshrl@galfaremirates.com;

Send your Safety Quiz Answers. We will select the Winner and mention the name of the person in next month issue with right answers.

ratheeshrl@galfaremirates.com



SAFE MAN OF THE MONTH: JANUARY 2016

Project 7067: Construction of Flow lines & Wellhead Installation of Typical Works in ADCO's Fields. (Package "C"- BuHasa/ Huwaila/ Bida Al Qemzan Fields)

Mohd. Ayub Khan
Painter
GEC NO. 271862
Certificate & Cash Award of AED 500

Mr. Jayaram Sooryabhan
Civil Helper
GEC NO. 275445
Certificate & Cash Award of AED 500

SAFE DRIVER OF THE MONTH: JANUARY 2016

Project 7067: Construction of Flow lines & Wellhead Installation of Typical Works in ADCO's Fields. (Package "C"- BuHasa/ Huwaila/ Bida Al Qemzan Fields)

Mr. Shahul Hameed
LD Driver
GEC- 271854
Certificate & Cash Award of AED 500

Faisal Verungal
LD Driver
GEC- 275037
Certificate & Cash Award of AED 500

Galfar Health & Safety Newsletter

SAFE MAN OF THE MONTH: JANUARY 2016

Project 7071: Construction of Flowlines & Wellhead Installation of Typical Works in ADCO's Field (Package "A" – SE Abu Dhabi (ASAB, Sahil, Shah, Qusahwira & Mender Fields)

Mr. Subash Pradhan
Mechanical Helper
GEC NO. 272073
Certificate & Cash Award of AED 250

Mr. Varghese Thomas
Rigger
GEC NO. 274441
Certificate & Cash Award of AED 250

Mr. Budeppu Deseya
Mechanical Civil Helper
GEC NO. 272884
Certificate & Cash Award of AED 250

Mr. Dashrath Choudhary
Rigger
GEC NO. 276074
Certificate & Cash Award of AED 250

SAFE DRIVER OF THE MONTH: JANUARY 2016

Project 7071: Construction of Flowlines & Wellhead Installation of Typical Works in ADCO's Field (Package "A" – SE Abu Dhabi (ASAB, Sahil, Shah, Qusahwira & Mender Fields)

Mr. Harjit Singh
Heavy Duty Driver
GEC NO. 275543
Certificate & Cash Award of AED 250

Mr. Daljit Singh
Heavy Duty Driver
GEC NO. 273848
Certificate & Cash Award of AED 250

Mr. Mohammed Sheriff
LD Driver
GEC NO. 275623
Certificate & Cash Award of AED 250

Mr. Baburaj Kurumaly
LD Driver
GEC NO. 275610
Certificate & Cash Award of AED 250

Health & Safety Newsletter

SAFE MAN OF THE MONTH: JANUARY 2016

Project 7070: EPC for Thamama Zone B Development Enhancement Project - Phase-1 (Project No. P12436)

Mr. Ranjito Mahato
Mech Helper
GEC NO. 275720
Certificate & Cash Award of AED 500

Mr. Sanjoo Singh
Grinder
GEC NO. 275753
Certificate & Cash Award of AED 500

SAFE DRIVER OF THE MONTH: JANUARY 2016

Project 7070: EPC for Thamama Zone B Development Enhancement Project - Phase-1 (Project No. P12436)

Mr. Daya Shankar
HD Driver
GEC NO. 275809
Certificate & Cash Award of AED 500

Mr. Shihabudeen Mukeiyan
LD Driver
GEC NO. 275549
Certificate & Cash Award of AED 500

SAFE MAN OF THE MONTH: JANUARY 2016

Project 7072: EPC for Buhasa Shuaiba South Artificial (Gas)Lift Project Phase-1 (Project No: P12435)

Mr. Hari Sharma
Mechanical Helper
GEC NO. 275602
Certificate & Cash Award of AED 500

SAFE DRIVER OF THE MONTH: JANUARY 2016

Project 7072: EPC for Buhasa Shuaiba South Artificial (Gas)Lift Project Phase-1 (Project No: P12435)

Safe Driver
RECOGNITION

Mr. Babu Paul
LD Driver
GEC NO. 271361
Certificate & Cash Award of AED 500

NEW FLEET IN GALFAR ABUDHABI

1) MAN 6X6 Crane mounted Truck - 04 Nos
2) MAN Fuel Tanker 2000 GAL – 01 No
3) MAN Water tanker (Nin Drinking) – 01 No
4) MAN Water Tanker (Drinking) – 01 No
5) Ashok Leyland 4x4 bus – 03 Nos
6) Plate compactor (PACLITE) – 02 Nos
7) 5 KVA Generator (ROBIN) – 02 Nos


i - SAFE / WE - SAFE