

ABOUT YOU AND YOUR COMPANY

KMS foundation of new Environmental Services Division

HSE's recent merger with Key Safety Services and Key Monitoring Solutions Corp. (KMS) brings an exciting new technology to our company. The CARMEN-REACTOR (C-R) air-quality and data-collection and communication system represents the industry's most sophisticated technology for stationary remote monitoring of hydrogen sulphide (H₂S) or sulphur dioxide (SO₂) emissions.

The unusual name is actually an acronym of two combined technologies. REACTOR, which stands for *Rapid Electrical Analog Control Technology On Request*, was developed in 1999 by Brad Turner through his company, Parallax Energy Systems Ltd. CARMEN – short for *Computer Aided Remote Monitoring Enhanced Notification* – was a prototype designed by Key Safety and modified by Brad after Parallax was sold to Key. With HSE's corporate restructuring, Brad is now President of the KMS division.

The requirement for air-quality-monitoring arose when the AEUB implemented critical sour well regulations after several high-profile sour gas blowouts in Alberta carried H₂S emissions to inhabited areas. As sour well drilling increasingly encroaches upon rural and urban populations, the is-



▲ Jim Brewster (left), HSE President, welcomes KMS President Brad Turner.

sue continues to be a contentious one, but the C-R technology may ease some of these concerns.



The C-R detection instrumentation is placed in a fixed location downwind of a potential sour well where the gas might travel in the event of accidental release. The ideal location is determined by various factors: plume-dispersion modeling; the topography of the land; the concentration of people or animals that could be affected; and negotiation between the energy developer and the potentially affected citizens. Powered by batteries recharged by solar panels, C-R continually monitors wind speed, wind direction, and air quality. Its sensors can measure H₂S concentrations from .200 parts per million (ppm) or 200 parts per billion (ppb), and SO₂ from .100 ppm or 100 ppb.

On a pre-programmed basis, C-R then transmits this data to a secure dedicated website via a satellite uplink. If the pre-determined threshold limits for acceptable air quality are reached or exceeded, the unit alerts the relevant parties by cellular telephone, satellite or both. If one communication system fails, the unit automatically switches to the next. This redundancy is essential to guarantee continuous data transmission and ensure C-R works even if the satellite link or cellular system fails for whatever reason.

Secure access to the website is available to all key stakeholders: the well operator, the proximate citizens, and relevant local or provincial regulators. The energy developer determines which parties may access the secure website to view the data, which includes the presence of H₂S, SO₂, wind speed, wind direction and temperature. In addition to providing recent data from specific C-R monitors, the website also gives information on the operator's emergency response plan.

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KMS continued...

C-R can also be programmed to sound an alarm if air quality goes outside of pre-determined parameters. This is done two ways. First, the unit itself emits an audible signal alerting anyone nearby to an air quality issue on the ground. The alarm also alerts the website. In response to the alarm, the monitor then will call a programmed number – typically that of the drilling or completions supervisor – or production operator retained to deal with such incidences on a 24-hour basis. In addition, should any C-R station quit reporting for any reason, this also triggers an alarm, thus ensuring that the problem is rectified as quickly as possible to guarantee truly continuous air quality monitoring.

The C-R technology contributes to a safe and workable relationship between resource developers and the nearby residents, and represents four significant advantages over other monitoring systems:

- Because the units are placed where everyone agrees they are needed, C-R is more cost-effective than other systems that involve people, portable monitors and telephones. The resource developer is able to provide the protection the public wants and needs without seriously affecting the economic viability of the project.
- C-R operates continuously, offering a vigilance



▲ The solar-powered, portable CARMEN-REACTOR sensors monitor ambient air quality and provide remote, real-time data to a secure Internet site.



▲ KMS also offers the DWM technology, which provides more accurate analysis of SO₂ and H₂S concentrations, but isn't as portable as the C-R units. Shown here is one of nine units that is available through the KMS division.

unmatched by other technology.

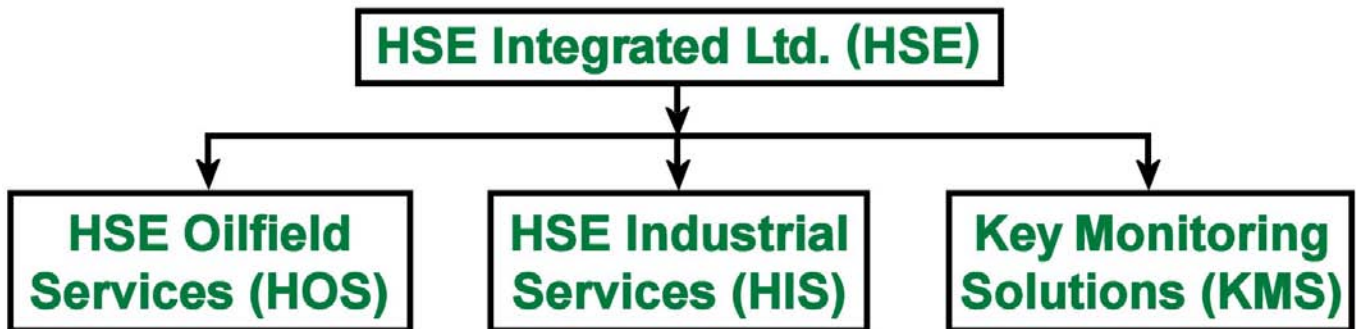
- The system has the ability to activate an alarm if air quality goes outside of pre-agreed parameters.
- C-R electronics are reliable, proven and robust. In addition, the reverse-alarm feature means that if the system does go down for any reason and fails to update the website regularly, the right people are alerted immediately.

C-R was developed to fill a real need among industrial operators and the surrounding communities. The KMS technology is so effective that the company currently has 125 monitors working in three countries.

Another air-quality monitoring system that had been offered by both HSE and KMS is the DWM, or *Downwind Monitoring* technology. The DWM units, which are contained in specially fitted trucks, measure air quality by pumping a sample of air into SO₂ and H₂S analyzers. The DWM technology is more accurate than C-R, measuring concentrations to 10 ppb. However since the analyzers are contained in vehicles, they are not as portable as the C-R units and cannot be placed in inaccessible locations such as mountain tops or residents' yards. The DWM data is recorded on a computer and monitored by a DWM technician who ensures the air quality does not exceed the Alberta ambient air guidelines. For an extra cost, clients may also view the DWM data via the Internet.

All the DWM units, rig rats and other air-quality-monitoring systems will now be managed out of the KMS division.

Corporate restructuring to increase client focus



Due to recent growth and diversification, HSE will be undertaking a major corporate restructuring to better serve our clients and employees.

As a service company, HSE's primary aim has been to meet the needs of our customers. It was determined that the best way to do this would be to create service business units to manage our diverse operations more efficiently.

HSE will be divided into the following four business units:

HSE Integrated Ltd. (HSE)

HSE will be transformed into a management company instead of an operating company. It will supply financial and administrative support services to the operating divisions to allow those divisions to focus on meeting the requirements of external customers.

HSE will provide the operating divisions with the following services:

- Access to capital
- Executive management
- Payroll and human resources
- Accounting and administration
- Safety and HSE services
- Overall marketing strategy
- Procurement and asset management
- Buildings, leases and office space
- Shared divisional services such as maintenance

HSE will also continue to set the overall direction and marketing strategy for the corporation to ensure a continuity of vision and purpose

for the following reasons:

- To allow employees the greatest opportunities for career advancement by moving freely between divisions should the need exist and should they choose to do so;
- To allow all divisions shared sales leads and customer contacts;
- To allow all divisions can shared labor and technical expertise when it is needed and when it is available;
- To allow all divisions a shared capital asset base, which will improve utilization and profitability;
- To allow all divisions to market to all customers the total resources of the entire HSE package.

HSE Oilfield Services (HOS)

HOS will focus on providing wellhead safety services to the upstream sector of the conventional petroleum industry. This is the area that deals with oil and gas well exploration, drilling, completion and workovers, as well as regional batteries and gas processing facilities – a market sector that is unique in the world of industrial safety.

This highly specialized niche market is the roots of our company, and it currently represents 85% to 90% of our total business. From an operational point of view, it will be business as usual, as HOS will continue to offer portable, call-out safety services that demand the mobility and responsiveness that HSE and its affiliates have built their reputations upon.

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Restructuring continued...

HSE Industrial Services (HIS)

HIS will market to the downstream sector of the petroleum industry and other industries requiring protection for workers, assets and the community. However, the short-term focus will be the non-wellhead operations of our existing customer base, such as refineries, petrochemical plants and the oilsands. Although the hazards associated with the refining and processing of hydrocarbons are very similar to the risks in finding and producing them, this business is totally different from that of HSE Oilfield Services.

The focus of HIS will be to significantly expand the services the division can offer its customers with its dedicated marketing personnel and technical expertise. As has been the case with oilfield services, the industrial services division will also grow through acquisition as the critical components of outsourced safety services for non-wellhead opportunities are identified.

Key Monitoring Solutions (KMS)

KMS will be the division to provide the *Environment* component of HSE. All major air-quality monitoring assets (besides the personal monitors used day-to-day in HOS and HIS) will be rolled into KMS and managed as a separate operating division. While KMS, HOS and HIS may be on the same location at the same time, the unique characteristics of KMS makes it ideally suited to be a separate business unit.

The CARMEN-REACTOR air quality monitoring technology is extremely valuable to resource developers and communities. Part of its appeal is that it is an independent source of accurate and reliable air quality information. It is neither a representative of the oil company, nor of the safety company hired to handle community contact or roadblock duty. This independence is critical to a successful relationship between the resource developer and the neighbors. KMS already works for HSE competitors, and will continue to do so.

High Level medic goes beyond the call of duty

An HSE medic has redefined customer service. Late last year, Wayne Spracklin, the Lead Medic /

EMR for the High Level branch, was on a Husky Energy construction site in Paddle Prairie when the camp cook and attendant abruptly quit, walking off the job at a camp that houses about 15 to 20 people.

Enlisting the help of one of the construction crew, Wayne donned an apron, cooked supper, and then did the laundry for the rest of the crew when they got in that night.



▲ Wayne Spracklin, the Lead Medic / EMR in High Level, redefined customer service when he volunteered to do the job of an AWOL camp cook.

Needless to say, the Husky gang was grateful to find dinner waiting and clean towels for their showers. The next morning the new camp cook and attendant arrived, no doubt expecting to find a grouchy, hungry crew and a *guys-in-the-kitchen* mess to clean up. Instead they were pleasantly surprised to find everyone fed, clean linen and the kitchen orderly and tidy.

"I was on site anyway, and there were no medical emergencies to deal with, so I figured that if we could turn 14 grumpy guys into happy campers, why not?" said Wayne.

The new cook asked Wayne what she could do to show her appreciation, and he expressed a desire for some fresh cinnamon buns. He reported that the next morning there was indeed a batch of freshly baked cinnamon buns waiting for him.

Wayne, who has been with HSE for just over four months, is a long-time resident of High Level, and a former civic firefighter.

This story is a great example of how a little extra consideration can make all the difference in the world to the people you work with, or work for.

Personnel Profile: Gord Atkinson

Gord Atkinson has a background that, at first glance, might not be perfectly suited to his new position as HSE's Training Manager. For more than 15 years he worked out of Whitecourt for the Northern Gateway Regional School Division, most recently as Deputy Superintendent. His responsibilities were many and varied, and included managing personnel, staff development, communications, budgets and technology, all of which will be of service to him in his job at HSE.

"Actually I'm surprised at the similarities between the job I did at the school district and the job here at HSE," Gord said. He explained that both positions involve balancing efficiency and effectiveness with regard to such considerations as structure, reporting, and optimization of facilities.

"The funding and operation of a school system is based entirely on the number of students," Gord explained. "At HSE it's still based on numbers, but in this case it's the number of staff and the number of clients."

As Training Manager Gord oversees both HSE's internal and external training considerations. The internal function relates to ensuring that the staff training objectives identified by the company can be met. Gord sees HSE's external training initiatives as a retail product. His responsibility in that regard is to make certain that the company has the physical space, curriculum and instructors to deliver that product to the industrial market in a profitable manner.

Gord's education is certainly well suited to



▲ Gord Atkinson, HSE's new Training Manager, will be based in the Edmonton office.

his new position. He holds two Bachelors degrees from Brandon University, one in Education and one in General Studies. He also possesses a Masters in Business Administration from Royal Roads University in Victoria.

As for hands-on safety experience, Gord served as a member of the Valleyview Volunteer Fire Department for 11 years. Gord and his wife Tracy of 21 years have two teenaged girls. For the time being the family will remain living in Whitecourt, however he will operate out of HSE's Edmonton office. His extra-curricular passion is all manner of family-oriented sports activities, and he confesses a fondness for playing hockey in the "beer league."

QUOTABLE:

"Sell practical, tested merchandise at a reasonable profit, treat your customers like human beings, and they will always come back."

— Leon L. Bean, President, L.L. Bean, Inc.

Personnel Profile: Kelly Goheen

Kelly Goheen is one of the primary individuals in charge of launching one of the company's newest operating divisions, HSE Industrial Services (HIS).

As Vice-President, Business Development for that division, he will be instrumental in leading the company into an entirely new market sector. Kelly will be reporting to Jim Hill, HSE's Executive Vice-President based in Simcoe, Ontario.

The pace of growth of the Industrial Services Division has yet to be determined, but Kelly envisions an immediate focus on business development in and around the oilsands mining operations in Fort McMurray.

"This will be a great opportunity for HSE to establish itself in other sectors of the oil patch and other industries," Kelly said. The bulk of the company's current wellhead, or upstream, business will now fall under the umbrella of the HSE Oilfield Services (HOS) division. Kelly explained that activity in that sector of the oil industry is largely cyclical, subject to the ups and downs of the price of oil, and the seasonality of drilling and completions operations.

"The move into the non-wellhead sector will help achieve HSE's revenue sustainability, which will be better for employees and for the company as a whole," Kelly added.



▲ Kelly Goheen, who comes to HSE through Key Safety, is VP, Business Development for the new Industrial Services Division.

Kelly brings a wealth of hands-on experience to his new position. He spent the last five years with Key Safety, most recently as Sales and Marketing Manager. Prior to that, he worked for eight years with Schlumberger, exiting that firm as Senior Field Sales Engineer. Kelly also spent 16 years with United Resource Safety in a variety of positions around the world.

"I've worked offshore, onshore, in plants and in the field," Kelly said. He also put in time in the Middle East, Asia and Europe.

When Kelly's not on the job, he's devoting his time to nurturing his children's sports interests. His nine-year-old daughter, Ainsley, is involved in competitive ski racing, and Kelly works with her team as a coach and instructor. His son Taylor, aged 16, is showing a talent for high school football on his team at Bowness High in Calgary. Kelly is an Alberta native, having grown up in Westlock near Edmonton.

Slave Lake EMR gets quick hands-on initiation

Lisa Desjarlais, one of HSE's newest Emergency Medical Responders (EMR), hadn't been on the job long before she had the opportunity to make use of her training.

On New Year's Eve, Lisa, who had only been with HSE a few weeks, was following a rig move out to a site north of Slave Lake when one of the trucks involved in the move rolled and injured the driver. Keeping a cool head and following procedure, she did a preliminary assessment, initiated treatment and called 911.

While waiting for an ambulance to arrive, Lisa immobilized the patient on a spine board and then followed the ambulance to the Slave Lake hospital. As it happened, the driver wasn't seriously injured, and was able to walk out of the hospital that night. However, the responding EMS crew and the hospital praised her actions and congratulated her on her confident handling of her first real emergency situation.

Lisa, who is 32, aspires to continue her training and ultimately hopes to get her Emergency Medical Technician designation.

HSE SAFETY FIRST

Safety messages and tips from the corporate Safety Department

Safety update

Despite record levels of field activity, HSE continues to make progress in fulfilling our major corporate, company-wide commitment to employee safety. From the field, workers are receiving their safety training, and paperwork is being completed as we slow down.

We know that improvement in safety performance is an ongoing process. With recent mergers, HSE is now the largest safety company in the industry. By achieving excellence in our own internal safety record, we are confident we will ultimately be the most respected company in the industry as well. Congratulations to all who have worked hard to make these positive changes!

Tire chain policy revision

The company Health and Safety Policy has been revised to include a requirement for all HSE vehicles traveling to the field to be equipped with tire chains. This policy also applies to contractors conducting field work on behalf of HSE.

January Safety Award Winners

Every month all field and shop personnel (including dayraters and contractors) that have worked safely within company guidelines are eligible for a monthly draw for HSE safety awards. With 12 positive monthly reports all staff, regardless of whether they've won a monthly prize, will receive an HSE leather jacket. The monthly prizes are gift certificates or travel vouchers with a 12-month expiry.

Employee winners:

Nick Frank, DWM Technician,
Red Deer – \$2500

Tristan Fehst, Firefighter,
Ft. St. John – \$1250

Contractor/Dayrater winner:

Tralauney Farthing, Medic/EMT,
Pincher Creek – \$1250

Home safety tips – ice safety

Did you know it takes at least five to seven days of temperatures in the low -20° C range before ice will become safe to walk, drive or skate on? It is important to note that one cannot tell the strength of the ice simply by its look and thickness, the daily temperature, or whether or not the ice is covered with snow. The strength of ice is determined by several factors:

- ✓ Local climatic factors such as wind, snow, rain, and temperature fluctuations, which can vary considerably from day to day;
- ✓ The presence of currents such as those at stream inflows and outflows, and those that follow the path of a stream or river;
- ✓ The presence of springs and the size and depth of the lake or pond;
- ✓ The distribution of the weight or load placed on the ice;
- ✓ The signs of expansion cracks.

What to do when someone has fallen through the ice:

- ✓ Do not attempt to rescue the victim. If the ice could not support their weight, it will not support your weight.
- ✓ Go to nearby location and call 911 for help. Wait for emergency responders to arrive to direct them to the exact location of the victim.
- ✓ If a responsible adult is present, have the adult return to try and assist the victim from shore.
- ✓ Try to calm and reassure the victim and help them stay afloat with anything that floats, such as plastic milk or soda bottles, or spare tires.
- ✓ If the victim is stable and afloat, try to reach and retrieve the victim with an item such as a rope, extension cord, ladder, branch, boat or clothes tied together.

- Betty Carew, CRSP, Safety Manager

Teamwork contributes to smooth well control job

A recent well control job that required the resources of several crews and locations proved to be a great testimonial to the effectiveness of the company's partnerships.

In January a drilling crew at a Cariboo Resources site at Indian Cabins, north of High Level, had a runaway well after a flow-T broke off.

"There was no fire, and no one was hurt" explained Chris Smith, HSE's Edmonton-based Field Operations Manager, "but it was fairly serious. It was a sour gas well that needed to be brought under control."

The initial call came into HSE's Red Deer office, which in turn contacted the Safety Boss office in Calgary. From that point, personnel and equipment were mobilized from various locations across the province.

Brian Campbell, HSE Field Superintendent out of Grande Prairie, happened to be in High Level, so he and High Level Station Manager

Dave Peters took one of HSE's air-office units from High Level to the location, arriving at 1:30 pm. On hand to supervise the well control work were Mark Badick and Hugh Chambers from Safety Boss's Calgary and Red Deer offices, respectively.

There were a few logistical problems involved in shuffling equipment between locations to meet the requirements of the job without leaving any location short. For instance, an HSE air-monitoring unit was moved from Red Deer to Grande Prairie so that a KMS Grande Prairie air-monitoring unit could be sent to the Cariboo site. One of HSE's "Smokey" fire-trucks, unit 20-1001, was sent out from Whitecourt. Also dispatched to the site was a Key Safety ambulance from Grande Prairie, and an HSE well-control tool truck from Red Deer.

Chris explained that on a well control job, all personnel must be on location before work can begin. By 9:00 pm a total of 10 crew had assembled, and were ready to start the job of bringing the well under control. By 2:30 the next morning the well was closed in, and by 4:00 pm all the personnel and equipment had left the site.

This job is notable in that it's the first emergency call-out situation to be handled with the combined manpower and equipment of HSE, Safety Boss, Key and KMS.

"The whole thing went really smoothly," Chris said. "The team pulled together to do a great job for the customer."

HSE NEWS

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CAODC Western Canada Rig Count	Feb. 14 2006	Feb. 15 2005
Alberta	528	491
Saskatchewan	48	49
British Columbia	140	144
Northwest Territories	0	6
Manitoba	7	1
Total	723	691