



The Ninth SPE International Conference on
Health, Safety and Environment in the O&G industry

CONCLUSIONS

developed by
the Programme Committee, and
the Executive Committee

The Ninth SPE International Conference on
Health, Safety & Environment
in Oil and Gas Exploration and Production



HSE Management Sub-Committee

- 8 Technical Sessions and 4 Panels; nearly 100 abstracts
 - Good debate; excellent participation
- Focus of this year's discussions has been how to progress to the next level
 - Integration of management systems as part of design and base operations
 - Sustainable systems and performance
 - Use of new and innovative tools and processes where appropriate, however must retain focus on effective implementation of base systems
 - Workforce competencies
- HSE Management continues to be a focus area for industry

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- Visible management commitment and leadership continue to be key to sustainable HSE performance
- Industry continues to make good progress, but we are not there yet
 - We should not be satisfied with where we are
 - Understand the risks and expectations impacting HSE performance
 - Share global best practices and lessons learned
 - Identify more effective ways to engage the workforce
 - Communication remains both a key element and a challenge
- Integration of effective HSE practices also remains a challenge
 - Understand the differences in how workers view safety expectations vs. health and environment
 - Recognize the similarities and differences in global value and belief systems (i.e., one size may not fit all)
- Successful HSE performance is linked to good overall business results



Safety Challenges

- Aging workforce and infrastructure
- Competency in era of rapid growth
- Partnering
- Global Standards
- Implementation and oversight and compliance of
 - Processes’,
 - Systems, and
 - Tools

Do we really live our values?



Getting off the Plateau

- Are we measuring the right things?





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Environment (1/2)

1. Climate change: we need

- to reduce our contribution to CO₂ emissions and to develop the means to mitigate it (CCS), not only within E&P, but beyond it (e.g. coal)
- the tools and an encouraging business/ regulatory context.
- long term view on infrastructure (transport in particular)
- more efficient products
- partnership with other industries for more efficient equipment and vehicles

2. Sensitive Environments: we can't afford to get complacent.

Industry has done a lot, and needs to do more, to keep its license to operate (good examples include marine mammals, ESHIA).



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Environment (2/2)

- 3. Green Chemicals: moving to green chemicals is a necessity, but these green chemicals must be at least as efficient as the ones they replace – otherwise the cure may be worse than the disease.**
- 4. Discharges: we have a lot of good stories to tell about our management of aqueous and solid discharges, hazardous wastes, and also of oil spill response.**
We need to work together with the stakeholders to create the favourable business context to implement these processes.



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Social responsibility

- 1. It's of growing importance to make our development sustainable. Increase of civil society questioning, starting with the respect of HR. Voluntary principles need to be more widespread.**
- 2. Need for anticipating these issues at the very beginning of E&P process**
- 3. We are still at the beginning of the road and we have to develop and implement methodologies and tools. Professionalisation needed**
- 4. Consistency among all operators and contractors in a country is an absolute need.**



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Health

1. We need to improve health reporting.
2. We made progress on epidemiologic studies. Conclusions must be implemented.
3. Stress and fatigue = risk management.
4. Occupational hazards should not be underestimated.

Security

1. Responsibility for governments must remain clear and is not transferable to the industry.



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Key messages to take away

- Leadership
- Process
- Competency
- Behaviour

+ 1 enabler :

- Technology



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Leadership

- Starts with the involvement from the top of the company
- Leadership sets the tone for the culture of the organisation
- A good leader is actively involved in the promotion of the systems and processes which enable sound HSE attitude



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Process

- ❑ Processes are the “speed limits” or controls for all that we do
- ❑ Adherence to the process is mandatory; it reduces the variability in outcomes. But questioning attitude is sound.
and allows for continuous improvement
- ❑ Peer reviews to control/review the application of processes
- ❑ Turn over of staff is a challenge for knowledge of process
- ❑ Maintaining HSE systems and processes is a continuous task.



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Competency

- ❑ Usual training is not enough
- ❑ We must provide education and ensure understanding of the material, the processes, and hazard/risk identification
- ❑ Elderly professionals are a fantastic wealth. It is our responsibility to make the best of it. “*Make the old young again !*”
- ❑ Reward competency and courage.



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Behaviour

- Everyone is personally responsible for safety
- The result of culture, training, and leadership
- Need for understanding the drivers
- Leaders behaviours is capital



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Enabler: Technology

- We have made tremendous progress over the past decades which helps us
- Further progress is necessary to adapt to new complexity
- CCS technology has still to be developed