

# ISO 45001: WHAT IT MEANS FOR THE OIL AND GAS INDUSTRY

## CONTRIBUTING AUTHORS:

CHERYL SAVAGE, SENIOR CONSULTANT, EMEA, SAI GLOBAL

WENDY BOWMAN, SENIOR CONSULTANT, EMEA, SAI GLOBAL

STEVE NICHOLAS, COMMERCIAL GENERAL MANAGER, EMEA, SAI

The world's first ISO standard for occupational health and safety (OHS) management systems, ISO 45001, is currently progressing through draft and review, with publication due in February 2018. If you are in the oil and gas industry and currently certified to OHSAS 18001 or AS/NZS 4801, you should be thinking about what migration to ISO 45001 means for your business.

### OIL AND GAS INDUSTRY: SAFETY SNAPSHOT

- In the US, the oil and gas industry occupational fatality rate is 2.5 times higher than the construction industry and seven times higher than general industry.<sup>1</sup>
- Particular hazards include crystalline silica, particulate, benzene, noise and radiation.<sup>2</sup>
- Nearly half of safety incidents in Australia were related to construction, commissioning or decommissioning activities, and 23% related to drilling, workover and well services.<sup>3</sup>
- In the UK, 2016 offshore industry statistics show one fatality, and six fatalities in the last 10 years, and an injury rate of 66 per 100,000 full-time equivalent (FTE) workers.<sup>4</sup>

Key changes in the new standard mean that if you're a supplier to the oil and gas industry, you may be impacted and will need to consider preparing for ISO 45001.

For inherently high-risk industries like oil and gas, this new standard is particularly significant. It has the potential to be a real game-changer, an opportunity to move forward in creating a safer and more prosperous industry. ISO 45001 will help organisations, both large and small, provide a healthy and safe workplace and prevent work-related injuries, illnesses and deaths by bringing OHS management into the heart of the organisation and aligning it with strategic goals.

This whitepaper outlines the key changes to expect when migrating to ISO 45001 for oil and gas industry organisations, the benefits and challenges in applying the new standard, and practical tips to prepare you for the change.

### WHAT'S CHANGING?

#### STRUCTURE

ISO 45001 follows Annex SL, the high-level structure approach common to other ISO standards such as ISO 9001:2015 (quality management) and ISO 14001:2015 (environmental management). This common framework ensures consistency, applies common language and means ISO 45001 can easily integrate with these other systems and fully integrate into your business rather than being a standalone system.

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<sup>1</sup> Witter, RZ, Tenney, L, Clark & Newman, LS 2014, 'Occupational exposures in the oil and gas extraction industry: State of the science and research recommendations, HHS Public Author Manuscript.

<sup>2</sup> Witter, RZ, Tenney, L, Clark, S & Newman, LS 2104, 'Occupational exposures in the oil and gas extraction industry: State of the science and research recommendations', HHS Public Author Manuscript.

<sup>3</sup> APPEA 2104, Health, Safety & Environment Report 2013-14.

<sup>4</sup> Health and Safety Executive (HSE) 2017, Offshore Statistics & Regulatory Activity Report 2016

## ANNEX SL HIGH-LEVEL STRUCTURE

1. Scope
2. Normative references
3. Terms and definitions
4. Context of the organisation
5. Leadership
6. Planning
7. Support
8. Operation
9. Performance evaluation
10. Improvement

### ORGANISATIONAL CONTEXT

The new standard requires an understanding of the business environment an organisation is operating in. It requires an understanding of the internal and external factors that may affect the intended outcomes of the OHS management system.

Organisations will need to examine issues, problems, changing circumstances and obligations that may affect their ability to achieve intended outcomes of the OHS management system. Factors from ageing assets and depressed crude oil prices to fracking and Brexit will all fall into the spotlight for the oil and gas industry.

It also requires consideration of the needs and expectations of interested parties, including workers, clients, visitors and other key stakeholders impacted by the business.

### BUY-IN FROM MANAGEMENT AND WORKER INVOLVEMENT ISN'T SUGGESTED, IT'S NEARLY REQUIRED

CEOs and top management will be accountable for how effective the OHS management system is, and they need to show a real commitment to a culture of good health and safety within their organisation. Top management will be responsible for ensuring OHS management systems are compatible with the organisation's strategic direction and ensuring OHS policy and objectives are established and align with the strategic direction.

The new standard recognises the value of worker consultation in the development of better OHS practices. It places a greater focus on workers actively participating in the development, planning, implementation and continual improvement of the OHS management system along with hazard identification and assessment of risk.

### HOW RISK-BASED THINKING CAN ENABLE ADOPTION

A risk-based approach takes centre stage with ISO 45001. This approach goes beyond OHS risks (which, if realised, have a negative outcome) to define risk as the uncertainty of an intended outcome. So instead of focusing just on the identification of hazards and what could go wrong, this risk-based approach is about identifying both the risks and opportunities for the organisation, and aligning risk and opportunity with the strategic direction of the business.

A company involved in offshore drilling that is certified to the current OHSAS 18001 standard is required to identify its health and safety hazards and risks, assess the risk (of harm to someone as a result of the drilling operations) and put the controls in place to manage that risk.

This is still a requirement in the 45001, but there is an additional requirement to determine the business risk and opportunities. For example, what would happen to the company's reputation if someone was hurt or killed during drilling? What would be the impact from a financial, operational, strategic and compliance risk perspective?

### THE PROCESS APPROACH

The new standard puts more focus on processes within an organisation – those activities that turn inputs into outputs. It encourages a full understanding of all the key processes in an organisation, where the key processes cause a risk to the business and have an inherent OHS risk, and how the organisation operates in a coordinated and complete way.

To manage these processes, the standard uses a Plan-Do-Check-Act (PDCA) approach:

- **Plan:** Set the objectives of the processes to deliver results
- **Do:** Implement and control these plans
- **Check:** Monitor and measure processes against objectives, policies and requirements
- **Act:** Take actions to improve processes

### ADVANTAGES (AND CHALLENGES) FOR YOUR ORGANISATION

#### GLOBAL STANDARDISATION

Working in the oil and gas industry, whether in exploration, drilling, production, construction or transport, and whether onshore or offshore, carries significant dangers, so health and safety has always been a key concern. Everyone in the industry is acutely aware of the risks and consequences.

However, incredibly complex supply chains, interconnected relationships on sites, manpower issues, a large-scale contract workforce and people with differing responsibilities mean health and safety has always been a difficult issue for the industry to manage.

ISO 45001 helps your organisation cut through this complexity. Take, for example, a contract worker who joins an organisation's oil rig in the North Sea after spending some time on one of its rigs off the South American coast. ISO 45001 will mean that worker is familiar with the standard to which they're required to work. This common understanding – having everyone across a global industry working to the same standards and principles – helps drive health and safety improvements.

#### STRATEGIC ALIGNMENT FOR DISTINCT BENEFITS

ISO 45001 involves a significant shift, but it's a shift that better aligns OHS with your organisation's strategic goals and direction, and encourages continual improvement. The ultimate intention of the alignment and the standard is to increase the overall health and safety performance of organisations. Expected benefits include:

- Reduced OHS risks
- Fewer work-related injuries, illnesses and fatalities
- Increased health and safety performance
- A more engaged, motivated workforce
- Improved brand perception
- Better corporate responsibility

#### STREAMLINING BUSINESS SYSTEMS

On a practical level, ISO 45001 is a great opportunity to develop an integrated management system within your organisation. If you are already certified for at least one other ISO standard, you can choose to integrate your management

systems. This integration promotes efficiency and better management of your contractors and supply chain, while also providing cost savings. It's a big step forward in not only mitigating risks, but also realising the upside of risk: opportunity.

#### A NEW WAY OF THINKING AND NEW RESPONSIBILITIES

Like all change, there will be challenges involved in moving forward. The main issues for organisations shifting to the new standard are:

- Changing culture to ensure risk-based thinking isn't just focused on potential to harm, but also on how this becomes a risk to the business
- The focus of the new structure and requirements extend from understanding and managing OHS risk, to business risk related to occupational health and safety matters
- Additional responsibilities of top management require them to demonstrate their leadership and commitment within the OHS system instead of delegating the responsibility to safety managers
- Risk further down the supply chain must be more tightly managed within your organisation. You can no longer discharge risk to your supply chain, but instead manage this as part of your own OHS management system

- For suppliers and smaller enterprises, alignment and integration means stricter controls on health and safety will be pushed down the supply chain
- Better standards of health and safety performance demanded from those operating in countries with less legislative intervention in health and safety

#### ARE YOU READY FOR ISO 45001?

If your organisation is currently operating under ISO 9001 or ISO 14001, migration to the new standard will be easier since the consistent structure enables efficient integration of OHS management into these existing management systems.

All organisations, however, will need to prepare by taking the following steps.

#### CONDUCT A GAP AUDIT

To build the bridge to get you over to ISO 45001 certification, you need to establish your starting point. A gap audit can help you understand your starting point. Even if your standards for health and safety are good they may have a different emphasis when compared to the new standard.

If your organisation is a larger player in the oil and gas industry, many of the new requirements may be familiar. Auditing your supply chain, however, may reveal your suppliers need to look more carefully at their standards, especially in terms of leadership requirements, worker involvement and risk-based thinking.

#### MONITOR DEVELOPMENTS AND FAMILIARISE YOURSELF WITH ISO 45001

A second draft of ISO 45001 was released on 19 May 2017 and the published version is expected in February 2018. As with all ISO management systems, there will be a transitional period for those operating under certified systems to the existing OHSAS 18001 and AS/NZS 4801 standards to allow time to implement the new requirements. It's expected that the usual three-year period will be applied to enable certified organisations to move from these existing standards to ISO 45001.

#### CONCLUSION

ISO 45001 is an opportunity to move forward and improve OHS outcomes at both an organisational and industry level. While change always brings some challenges, the benefits of this new standard will be significant, particularly to the highly regulated and high-risk oil and gas industry.

Are your risk management systems aligned with your organisation's strategic goals?

Have you adopted risk-based thinking as a way to proactively improve business performance?

Contact SAI Global today to learn more.

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