

Governing Energy

A Perfect Match

Volume 1 Number 22—December 17, 2012

Since April 2010, billions of dollars have been spent to transform the upstream oil and gas sector into one of a Culture of Safety.ⁱ The industry has launched major initiatives in partnership with the US government (BSEE) and other groups with applicable knowledge.

The Center for Offshore Safety was established with the mission of promoting the highest level of safety in the offshore well construction process and has established mandatory safety and environmental management system (SEMS) standards based on API RP-75.ⁱⁱ This effort is supported by an industry sponsored SEMS Toolkit to help operators navigate these new requirements.ⁱⁱⁱ SEMS also requires an audit, not unlike Sarbanes-Oxley for these safety and environment processes.^{iv}

Other initiatives include the formation of rapid response organizations such as the Marine Well Containment Company (MWCC), whose mission is to provide well containment equipment and technologies in the deep water U.S. Gulf of Mexico.^v A similar capability is provided by the Helix Well Containment Group.^{vi}

The *tip of the industry spear* for these and other efforts to attain the Culture of Safety is the individual operating and/or maintaining the equipment and assets necessary to find and produce oil and gas. Recognizing this, increased training and proficiency is a major component of SEMS.

So how does this highly trained individual, laboring to manage or maintain a critical facility asset such as a pump or compressor know he or she is actually working on the correct piece of equipment? Moreover, if hazardous material is involved is it properly identified?

The U.S. Department of Defense implemented item Unique IDentification several years ago. It is an asset identification system that includes unique item identifier (UII) technology as well as Serialized Item Management (SIM). SIM is defined as the collection of business processes used to provide actionable information about individual assets.^{vii}

Three legs of the Culture of Safety stool should include; SEMS and associated processes, Well and spill containment, and Item Unique IDentification. This governing model assures that the full capabilities and knowledge base of the first two legs can be applied on assets and equipment as appropriate. This should help decrease mistakes and reduce downtime. The resulting stool will be stable and level.

Industry efforts to upgrade deepwater operations have included looking at best or good practices from other industry sectors (nuclear) as well as government agencies such as NASA and the military. Item Unique IDentification should be considered as well.

If facility assets and equipment are not properly identified, the entire industry effort over the past three years may be put at risk. If another major incident is caused by equipment failure, this beleaguered industry will potentially pay a very high price and suffer yet another loss of public confidence.

Enterprise risk management strategies must have a unique identification process in place for all critical assets. This seemingly minor issue assures a perfect match between the maintenance process and the right piece of equipment.

How does your risk mitigation strategy assure a perfect match?

About the Author

Dr. [Scott M. Shemwell](#) has over 30 years technical and executive management experience primarily in the energy sector. He is the author of two books and has written extensively about the field of operations management. Shemwell is also the CEO of Knowledge Ops, Inc.; a firm that focuses on providing its customers with solutions enabling operations excellence and regulatory compliance management.

End Notes

ⁱ <http://www.centerforoffshoresafety.org/>

ⁱⁱ http://documents.api.org/rrserver/browser?title=/75_E3

ⁱⁱⁱ <http://www.centerforoffshoresafety.org/toolkit.html>

^{iv} <http://www.centerforoffshoresafety.org/documents.html>

^v <http://www.marinewellcontainment.com/index.php>

^{vi} <http://www.hwcg.org/>

^{vii} http://acquisition.navy.mil/home/acquisition_one_source/item_unique_identification_iuid