

Macaé, May 20th 2015

MINUTES OF IADC-BRAZIL HSE COMMITTEE MEETING HELD ON May 20th 2015 4:00 p.m. TO 5:00 p.m. AT FALCK SAFETY SERVICES IN MACAE

Present at this meeting were the following:

- Graham Gall Falck
- Mario Ielago QGOG
- Tiago Oliveira Ensco

- Brandon Burt NSL America - Tony - IADC
 - Thaisa Aleixo IADC-BRAZIL

- Matheus Tavares Petrobras
- The agenda for this meeting followed the same line of the previous meeting agenda. The focus of the meeting was as follows:
 - Review of the previous meeting minutes.
 - Select an HSE topic for the IADC General Meeting on July 30th.
 - Review HSE material generated from safety workshop and/or defining areas requiring work group discussions / workshops.
 - Present Dropped Objects statistics.

Marcio Martions emailed a list of his thoughts to me considered about:

- Define and develop a document for Drops prevention based on industry best practices and requirements:
 - General requirements (introduction of dropped objects definition and types

 dynamic and static).
 - 2. Management of Change process to control temporary equipment at heights (frequency of inspection, secondary retention, removal...).
 - 3. Inspections and surveys on derricks, cranes, moonpool, workshops... with potential for drops (frequency, standard...).
 - Secondary retention (what, where and how...) we know that just putting a small lose sling around a light fixture will not prevent it from dropping; be more specific on types and strength.
 - 5. Collision checklists for moving equipment.
 - 6. Drops tools (tethered tools) for working at heights / logbooks.
 - 7. Lifting operations (pre-inspections, restricted areas).
 - 8. Surplus and redundant equipment.
 - 9. Securing of stored equipment.
 - 10. Training package (Drops Awareness and Best practices).



The following items were agreed upon

- The previous meeting minutes was displayed on the screen and the group reviewed the agreed and action items.
- Dropped objects Technic information should include items such as:
 - 1. How to improve the rules.
 - 2. Analyze mechanic process control.
 - 3. Avoid drops.
 - 4. Good practices.
 - 5. Calculator to prevent drops events.
- The calculator to prevent drops events should be standard in the industry. Petrobras uses only a specific online drops calculator and if agreed by everyone this could be the standard one for Brazil.
- The dropped objects data from Petrobras (from 2012 to April 2015) was presented during the meeting. Some of the considerations were:
 - 1. Petrobras team has started for the first time a project for maintenance and inspection of DC's equipment because 39% of the drops were caused by failure in maintenance and inspections of equipment.
 - 2. In 2014 it was calculated that in total 4000kg of objects dropped throughout the year while in 2015 (from January to March) there already has been 3100kg. The number of overall drops had decreased while the weight of the objects dropped had increased. Conclusion: bigger objects have been dropped in 2015.
 - 3. Petrobras had a meeting with the three companies that had the worst statistics and made an action plan. Of those three companies two had improved and one remained the same.
- It was agreed to make a short presentation for discussion at July's GM. The presentation will contain:
 - 1. Drops Statistics.
 - 2. Industries best practices.
 - 3. Action plans.
- Near misses are included in the program of Dropped Objects. Although, companies many times do not report this important topic so it is not possible to have a reliable statistics of its occurrence. The companies need to be made aware of its importance.

The following item was discussed yet it remains open

• The International Marine Organization (IMO) committee has safety information of the members. They could share with IADC the statistics of the drilling industry for each country.



Actions

- Mario to send Dropped Objects presentations from the Drops Workshop in Rio to Thaisa for distribution to HSE committee.
- Mario to get worldwide statistics compared with Brazil's statistics (from Petrobras) to be presented at July's GM. The deadline for this presentation is the next HSE committee meeting in June.
- For an overview of Brazil's good and bad action plans:
 - 1. Transocean has a very good practice. Marcio to bring the information about their action plan for the next HSE committee meeting.
 - 2. Petrobras has information from companies on good practices. Marcio to email Cristiano Zank and Fabricio Manhães to get Petrobras` feedback about good/bad action plans.
- Fabricio to send an invitation of Petrobras RAC's meeting to the committee ASAP.

Next Meeting

The next meeting for the HSE committee was agreed to be held on June 17th at 4:00pm. The meeting will be at Falck Safety Services.