Agenda Item #1: Welcome & Introductions, Facility Orientation & IADC Anti-Trust Guidelines

The IADC Environmental Subcommittee was called to order by Travis Warden, Paragon Offshore, and Subcommittee Chair. Travis welcomed everyone and thanked them for attending. Brenda Kelly, IADC, then provided the attendees with the building and emergency response information. Mr. Warden asked everyone to introduce themselves, see the attached attendance sheet.

Brenda Kelly, IADC, reviewed the IADC Anti-trust Policy & Guidelines, calling attention to the prohibited discussion topics. For a copy of the IADC Anti-trust Policy & Guidelines please refer to [http://www.iadc.org/iadc-antitrust-policy-guidelines/](http://www.iadc.org/iadc-antitrust-policy-guidelines/).

Agenda Item #2: General Discussion- Incident Sharing- Best Practices

A. Brenda Kelly provided a letter from Taf Powell, IADC Executive Vice President for Regulatory Affairs, who requested the assistance of US-based members in deriving practical (and where possible), unequivocal data that convincingly establishes the integrity of unconventional hydrocarbon operations. Attendees offered information about an Austrian university’s data gathering efforts and research on unconventional drilling. They pointed to other resources also, and will supply the web links and related data to Dr. Kelly. Patterson UTI representative informed the group of an effort to document and report Marcellus Shale drilling benefits, which also counter some of the public concerns over hydraulic fracturing practices.

Agenda Item #3: Regulatory Reports and Discussion/Comments

A. **Fuel Oil: Worldwide Average Sulfur Content 2014= 2.46%**
   
   Under the provisions of MARPOL Annex VI, Regulation 14, the availability of fuel oil to meet the global 0.5% Sulphur limit in 2020 or 2025 is to be determined by the Committee in 2018. IMO is establishing a Steering Committee to determine the availability of 0.5% Sulphur fuel oil by 01 Sep 2015 with a targeted “report back” date in 2016. Supply for compliant fuel oil is based on geographic fuel availability vs. refinery capacity. IMO is drafting non-mandatory guidance for Coastal State Authorities to follow in an effort to improve the quality control from their local suppliers. This may require amendments to the local legal framework and could potentially limit the local authority’s span of control.

B. **Air: NOx Record Keeping Requirements:**
   
   The committee approved the amendments to MARPOL Annex VI, Regulation 13.5, concerning the record keeping requirements for engines that are Tier 2 and both Tier 2/3 that are installed onboard ships constructed on or after 01Jan 2016, which operate in NOx ECA Areas. Recordkeeping is to be in a logbook that is “prescribed by the Administration.”
C. Water: Ballast Water Convention (Status of Ratification= 44 States and 32.86%)
   Anticipation of ratification has urged MEPC to facilitate the implementation of the convention by using a “Road Map” to include:
   - Non-Penalization of Ships already fitted with treatment type systems under the G8 Guidelines.
   - Extended trial periods for treatment approaches that do not meet the D-2 Criteria, for experience building.
   Currently, 57 ballast management systems have been type approved to the D-2 standard, however, Ecomarine-EC (Japan) is the only unit to reach “final approval status.” This unit operates on disinfection by in situ electrolysis, followed by neutralization with sodium thiosulfate.

D. Potable Water: BOEM and EPA continue to show expressed interest in the drinking water standards for offshore units. Movement has been initiated with the review of Platforms operating in the US GOM and the quality of potable water. The EPA is showing intent on presiding over the standards for drinking water at this present time. Movement is being monitored by the Offshore Operator’s Committee (OOC).

E. Waste: Amendments to MARPOL Annex I, Regulation 12
   The committee has addressed Regulation 12 surrounding oil residue (sludge) arrangements and which has substantially restructured/simplified the language to incorporate the unified interpretations. This change is related to disposal, interconnections and tank cleaning arrangements. The revision no longer allows for existing arrangements, where an oil residue (sludge) tank may have discharge connections to oil bilge water holding tanks, a tank top or oily water separators. Modifications may be required to be performed to ships constructed previous to January 2017 that are to reach their first certificate renewal on or after Jan 2017.

F. Consumer Price Index Adjustments of the Oil Pollution Act of 1990 Limit of Liability for Offshore Facilities:
   On 12 December 2014, BOEM issued a Final Rule, which adds to the limit of the regulations on the Oil Spill Financial Responsibility (OSFR) for offshore facilities in order to increase the limit of liability for damages caused by the responsible party for an offshore facility. BOEM increased the limit of liability for damages under OPA from $75 million to $133.5 million. Effective date: 12 January 2015.

G. UK HSE Case Guidelines Revisions (2015)
   Safety Case 2005 Regulations are being replaced by the 2015 Regulations that include the following:
   - The environmental aspects of potential incidents and the existing requirement for independent verification of safety critical equipment has been expanded to also cover environmentally critical equipment, and;
   - A Company Major Accident Prevention Policy.

H. Hydraulic Fracturing on Federal and Indian Lands
   On 26 March 2015, the Bureau of Land MGMT issued a Final Rule. The key changes include the allowable use of an expanded set of cement evaluation tools to help ensure that usable water zones have been isolated and protected from contamination, replacement of the “type well” concept to demonstrate well integrity with a requirement to demonstrate well integrity for all wells, more stringent requirements related to claims of trade secrets exempt form disclosure, more protective requirements to ensure that fluids recovered during hydraulic fracturing operations are contained, additional disclosure and public availability of information about each hydraulic fracturing operation, and revised records retention requirements to ensure that records of chemicals used in hydraulic fracturing operations are maintained.
operations are retained for the life of the well. This rulemaking also provides opportunities for the BLM to coordinate standards and processes with individual states and tribes to reduce their admin costs and improve efficiency. Effective date: 24 June 2015

I. Chemical Management and Permissible Exposure Limits (PELs)
In October 2014, OSHA issued a Request for Information. During their review of managing chemical exposures in the workplace, they decided to seek stakeholder input about more effective and efficient approaches that would address the challenges found within the current regulatory approach. This request is concerned primarily with chemicals that cause adverse health effects from long-term occupational exposure. Revised comment due date: 9 October 2015.

J. Effluent Limitations Guidelines & Standards for the Oil & Gas Extraction Point Source Category
EPA issued a proposed rule, which would better protect human health and the environment and protect the operational integrity of publicly owned treatment works (POTWs) by establishing pretreatment standards that would prevent the discharge of pollutants in wastewater from onshore unconventional oil and gas (UOG) extraction facilities to POTWs. UOG extraction wastewater can be generated in large quantities and contains constituents that are potentially harmful to human health and the environment. Because they are not typical of POTW influent wastewater, some UOG extraction wastewater constituents can be discharged, untreated, from the POTW to the receiving stream; can disrupt the operation of the POTW (e.g., by inhibiting biological treatment); can accumulate in bio-solids (sewage sludge), limiting their use; and can facilitate the formation of harmful disinfection by-products (DBPs). Comment due date: 8 June 2015. The most recent Unified Agenda indicates that a final rule is planned for August 2016.

Agenda Item #4: Wildlife Center of Texas- Sharon Schmalz- Presentation and Show & Tell
Sharon Schmalz, Executive Director of the Wildlife Center of Texas (subsidiary of the SPCA), was onsite to provide an educational presentation followed by a show and tell of two mascots (owl and hawk). Sharon discussed the mission for the Wildlife Center and discussed their rehabilitative efforts towards injured and helpless wildlife. The Wildlife Center of Texas plays a significant role in oiled wildlife emergency response for a variety of industries and has a full response team ready to activate 24/7. The Center also provides educational and training workshops for individuals wanting to volunteer their efforts or to just educate themselves. Donations are accepted and are tax deferrable. For more information visit www.WildlifeCenterofTexas.org

Agenda Item #5: Environmental Key Performance Indicators (KPI)
The group held a discussion on continuing their efforts surrounding the Environmental Key Performance Indicator (KPI) Project. This project will help serve the industry in multiple capacities such as formulating baseline metrics, showing improvement as an industry, and to inform the public of the actual impact drilling has on the environment versus what is speculated. All data will remain strictly confidential both internally and externally.

The group discussed the relevance of certain reporting parameters and concern was expressed regarding the amount of parameters on the onshore assessment. Further suggestions were to make the information quarterly, similar to the ISP Program, instead of annually to provide better trending. This effort will require full support of the HSE Committee with additional offline efforts that may be necessary in order to fully set this into motion. For more information or to volunteer please contact Travis Warden (twarden@paragonoffshore.com) or Kurt Bailey (kurt.bailey@patenergy.com)

Meeting was adjourned at 11:00 am
## Attendance Sheet

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<td>Dana</td>
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<td>Andra</td>
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<td>Brenda</td>
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<td>MOBILE SAFETY SOLUTIONS</td>
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