

MAINTENANCE COMMITTEE MEETING MINUTES

12 October 2016

Location: IADC - Crown Center 1 & 2 Conference Rooms

Call to Order / Agenda:

The committee was called to order and the attendees were welcomed by the IADC Maintenance Committee Vice Chairman, Michael Anatra (Parker Drilling). (The Committee Chairman was unable to attend this meeting.) The Vice Chairman provided an overview of the proposed agenda for this meeting

A building security and safety briefing was given by Mr. John Pertgen (IADC).

Introductions:

Each attendee provided an introduction of them self and their company affiliation.

IADC Antitrust Policy and Guidelines and Committee Mission Statement:

Mr. Pertgen provided a review of the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage.

Regulatory Review / Update:

John Pertgen (IADC) provided the Committee with information about the two IADC-published semi-annual regulatory reports on the revised IADC website:

- 1. International Standards Activities affecting the Offshore Oil and Gas Industries --This report provides a handy reference to the standards development activities of various organizations (e.g., the International Maritime Organization, International Labor Organization, the International Organization for Standardization, and various international trade associations).
- Federal Regulatory Actions Impacting the Offshore Industry This report provides a reference summary that reflects the regulatory actions, announced in the Federal Register by U.S. governmental agencies, which may affect operations in the oil and gas industries.

(Note: Both reports are available at: http://www.iadc.org/offshore-operating-division/reports/

A list of some of the highlighted areas from the Federal Regulatory Actions that were covered at this meeting is included at the end of the minutes.

Main Presentation: Decreasing Human Error in Maintenance using Workspace Design and Labeling by Dr. Mather Minu Shikha.

The main topics covered in this presentation were:

-What is the Human Element? -What is Human Error? -Types of human error -Why is human error important to focus on -Human error in maintenance -Typical explanation for incidents -What causes human error -How to eliminate or minimize human error -Performance influencing factors -Goals for the design of maintenance -Communication and human error -Procedures and human error -Procedures content -Examples of maintenance management issues -Maintenance work design goals. -Shift handover considerations -Basic of Human Factor oriented design for maintenance -Why is labeling important?

USCG Risk-based inspection program by Capt Josh Reynolds. (USCG)

-Review of currently proposed risk based inspection program in GoM -What is and how does the maintenance stacking plan get utilized?

Class Society Issues

Survey arrangements applicable to drilling systems by David McKay (DNVGL).

The main topics covered in this presentation were:

-PMS RCM (Proactive maintenance)

-Maintenance Analysis

-Maintenance Management

-Competence Requirements

-Potential benefits of PMS RCM

-PMS-RCM approval process

Please contact David McKay [David.McKay@dnvgl.com] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

Remote Inspection Techniques by Dave Forsyth (ABS)

The main topics covered in this presentation were:

-Types of remote inspection techniques (Rope Access; High Resolution Cameras; Crawler type ROVs; Hot Tap Piping and Camera; ROV- Deep Water; ROV- mini; Autonomous Underwater vehicle; Unmanned Aerial Vehicle (Drone));

-Capability of each

-Restrictions of each

-Is it proven technology

Please contact Dave Forsyth (ABS) [jforsyth@eagle.org] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

Lunch

Asset Integrity Conference 2017

Leesa Teel reviewed the Asset Integrity Conference topics, timeline and suggested length for the 2017 conference.

<u>Caterpillar</u>

Robert Froebel (CAT) provided an update for all the issues that CAT is working on for our industry.

Please contact the CAT representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues regarding your CAT equipment. [Froebel_Robert@cat.com]

<u>ACTION ITEM</u>: Need update on 3516 ASO Valve redesign issue and Interim correction of using new vertical supports.at the next meeting

National Oilwell Varco

Ian McWilliam provided an update for all the issues that NOV is working on for our industry. He and Mr. Blackburn discussed the following topics:

-PS-495

-NOV Rig Systems Aftermarkets Group (upgrades, maintenance, repair and overhaul)

-Continuous recertification

-5 YR in Field Recertification

Please contact the NOV representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues regarding your equipment. [Ian.McWilliam@nov.com or Trent.Blackburn@nov.com]

ACTION ITEM: Provide more information regarding continuous recertification for top-drives

Election of Chairman 2017:

Mr. Frank Breland was nominated, seconded and ran unopposed for the position of 2017 Chairman. Congratulations on another term. [After learning of his re-election, Mr. Breland appointed Mr. Anatra, who accepted the appointment, as the vice chairman for 2017.]

Future Topics:

Phased array on the top-drive quill shaft Drone survey for rigs and piping etc.

Info Sharing: None

<u>Open Forum</u>: Members discussed ongoing issues with their respective rig maintenance programs.

Adjourned: 1415hrs

ACTION ITEMS:

1. CATERPILLAR needs to provide an update on the 3516 ASO Valve redesign issue and Interim correction of using new vertical supports at the next meeting

2. NOV to provide more information regarding continuous recertification for top-drives; Additional follow up on customer survey is also requested.

Lunch sponsors for 2017 committee meetings held at IADC will be:

11 January	- NOV
12 April	- CAT (suggested)
12 July	- TBD
11 October	- TBD

<u>REGULATORY HIGHLIGHTS</u> DHS / U.S. Coast Guard

- Eighth Coast Guard District; Interim Outer Continental Shelf Risk-Based Resource Allocation Methodology.(USCG-2016-0640) (RIN not listed; CFR not listed) On 5 August 2016 (<u>81 FR 51923</u>) the USCG issued a Notice of Availability and request for comments regarding an interim risk based resource allocation methodology for inspections of certain OCS units in the CGD8 area of responsibility. This methodology will be implemented for a five-month trial period beginning on 1 AUG 2016. After the trial period, it will be finalized within D8 and submitted to CG HQ for consideration at the national level. Comment due date: 6 September 2016.
- Draft Revisions to the Marine Safety Manual, Volume III, Parts B & C, Change-2.(USCG-2016-0669) (RIN not listed; CFR not listed) On 15 July 2016 (<u>81</u> FR 46042) the USCG issued a Notice of Availability with a request for comments. The notice indicates that substantive changes include: (1) Updated guidance to align with the Howard Coble Coast Guard and Maritime Transportation Act of 2014; (2) manning scales for towing vessels certificated under 46 CFR Subchapter M from the recently published Inspection of Towing Vessels final rule (<u>81 FR 40003</u>, June 20, 2016); and (3) various policy updates involving vessel manning. Comments due date: 13 September 2016.
- Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities with Dynamic Positioning Systems. (RIN 1625-AC16; 46 CFR 61, 62, and 33 CFR 140, 143, and 146). On 28 November 2014 (79 FR 70943) the USCG issued an NRPM, which proposes to establish minimum design, operation, training and manning standards for MODUs and other vessels using DP systems to engage in OCS activities. Establishing these minimum standards is necessary to improve the safety of people and property involved in such operations, and the protection of the environment in which they operate. This notice would decrease the risk of a loss of position by a DP MODU or other vessel that could result in a fire, explosion, or subsea spill and supports the Coast Guard's strategic goals of maritime security and protection of natural resources. Comment due date: 26 February 2015.

On 6 February 2015 (<u>80 FR 6679</u>) the USCG extended the comment period for this rulemaking. New comment due date: 27 May 2015. The most recent Unified Agenda indicates that a final rule is planned for December 2016.

On 29 July 2016 (<u>81 FR 49908</u>) the USCG issued a Notice of Availability of DP training certification programs. It indicated that the USCG is aware of only three (3) accepted training certification programs for DP:

- The Offshore Service Vessel Dynamic Positioning Authority's (OSVDPA) MPP-1-001, the OSVDPA's Manual of Policies and Procedures (Version 1) (January 2016);
- The Nautical Institute's Dynamic Positioning Operator's Training and Certification Scheme Version 1.1 (January 2015); and,
- Det Norske Veritas/Germanischer Lloyd's Recommended Practice for Certification Scheme for Dynamic Positioning Operators (DNVGL-RP-0007).

[On 7 May 2015 IADC submitted <u>comments</u> on this rulemaking]

• Harmonization of Standards for Fire Protection and Extinguishing Equipment. (USCG-2012-0196). (RIN 1625-AB59; 33 CFR 140 and 145, 46 CFR 28, 31, 32, 34,71, 72, 76, 91, 95, 107, 108, 116, 118, 132, 159, 161, 162, 164, 169, 175, 177, 181, 189, 190 and 193). The planned rulemaking would harmonize selected regulations for structural fire protection and fire detection equipment with international standards as set forth in SOLAS. This would also update the standards by referencing national industry standards. No FR entry has been published to date.

On 13 January 2014 (79 FR 2254) the USCG issued an NPRM to amend the regulations for certain design and approval standards for fire protection, detection, and extinguishing equipment on inspected and uninspected vessels, OCS facilities, deepwater ports, and MODUs. These amendments would harmonize the current USCG regulations with the appropriate national and international consensus standards, address advances in fire protection technologies and standards, update CG approval processes for fire detection and alarm systems, and revise the regulations for other types of equipment and components. Comment due date: 14 April 2014.

On 22 July 2016 (<u>81 FR 48219</u>) the USCG issued a <u>Final Rule</u>, which harmonizes approval processes for fire detection and alarm systems; and revises Coast Guard regulations for other types of equipment, materials, and components, such as spanner wrenches, non-metallic pipes, and sprinkler systems so that USCG regulations remain current and address advances in technology. Effective date: 22 August 2016.

[On 14 April 2014 IADC submitted <u>comments</u> to this docket]

• Transportation Worker Identification Credential (TWIC) - Reader Requirements. (USCG-2007-28915) (RIN 1625-AB21; CFR 33 CFR Parts 101, 104, 105, and 106) On 27 March 2009 (74 FR 13360) the USCG issued an ANPRM, which discusses their preliminary thoughts on the potential requirements for owners and operators of certain vessels and facilities regulated by the USCG under 33 CFR chapter I, subchapter H, for use of electronic readers to work with TWIC as an access control measure. They are proposing to set up three risk based requirements with varying levels of document verification requirements. (Those facilities and vessels with a higher risk would be required to utilize the security features and full risk reduction benefit, whereas the lower level risk units would only need to implement some of the security features) This proposed rulemaking also discusses the recordkeeping requirements for those owners or operators required to use an electronic reader, and amendments to security plans

previously approved by the USCG to incorporate the TWIC requirements. Once finalized, it would complete the implementation of the Maritime Transportation Security Act (MTSA), as well as the requirements of the Security and Accountability for Every Port Act of 2006, for regulations on electronic readers for use with TWICs. Comment due date: 26 May 2009.

On 23 August 2016 (<u>81 FR 57651</u>) the USCG issued a <u>Final Rule</u>, which implements the requirements as stated in the NPRM. Effective date: 23 August 2016

DOI / Bureau of Safety and Environmental Enforcement (BSEE)

• Clean Oil and Gas and Sulphur Operations on the Outer Continental Shelf – Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf (BSEE-2013-0011) (RIN 1082-AA00; 30 CFR 550) On 24 February 2015 (80 FR 9916) the DOI, acting through BOEM and BSEE, issued a proposed rule to revise and add new requirements to regulations for exploratory drilling and related within the Beaufort Sea and Chukchi Sea Planning Areas (Arctic OCS). The Arctic region is characterized by extreme environmental condition, geographic remoteness, and relative lack of fixed infrastructure and existing operations. The proposed rule is designed to ensure safe, effective, and responsible exploration of the Alaska OCS oil and gas resources, while protecting the marine, coastal, and human environments, and Alaska Native's cultural traditions and access to subsistence resources. Comment due date: 27 April 2015

On 20 April 2015 (<u>80 FR 21670</u>) the BSEE issued an extension of the comment period. The new comment due date: 27 May 2015.

On 15 July 2016 (<u>81 FR 46477</u>) the BSEE issues a <u>Final Rule</u>, which addresses a number of important issues and objectives, including ensuring that each operator:

- Develop an integrated operations plan (IOP) that addresses all phases of its proposed Arctic OCS exploration program, and submit the IOP to BOEM at least 90 days in advance of filing its Exploration Plan (EP);
- Use only equipment or materials that are rated or de-rated for service conditions that can be reasonably expected during operations;
- Conduct a SEMS audit once per year for every year in which Arctic drilling is conducted.
- Employ real-time monitoring (RTM) with the capability to transmit data, as it is gathered, to a designated on shore location where it must be stored and monitored by qualified personnel who have the capability for continuous contact with rig personnel;
- Describe in their APD how they will utilize the relevant provisions of the best practices of API RP 2N Third Edition;
- Perform a pressure test of the BOP system on a 14-day cycle;
- Even if the MODU is designed and classed for Arctic conditions, perform an assessment for the specific environmental conditions during the planned window of operations (Equipment on the MODU used to support the drilling operations should also be evaluated for suitability for Arctic conditions, but should be evaluated using the appropriate standards for equipment operating in the Arctic environment, not a structural design standard for the Arctic region.);

- Capture of all cuttings from operations that utilize petroleum-based mud and, at the discretion of the Regional Supervisor capture of cuttings from operations that utilize water-based mud.
- Have access to, and the ability to promptly deploy, Source Control and Containment Equipment (SCCE) while drilling below, or working below, the surface casing;
- Have access to a separate relief rig located in a geographic position to be able to timely drill a relief well to kill and permanently plug an out-of-control well under the conditions expected at the site in the event of a loss of well control;
- Have the capability to predict, track, report, and respond to ice conditions and adverse weather events;
- Effectively manages and oversees contractors; and,
- Develop and implement an Oil Spill Response Plan (OSRP) that is designed and executed in a manner that accounts for the unique Arctic OCS operating environment, and have the necessary equipment, training, and personnel for oil spill response on the Arctic OCS.
- Designs and conducts exploration programs in a manner that accounts for Arctic OCS conditions;

The final rule furthers the Nation's stewardship of the Arctic's environment and resources, and establishes specific operating models and requirements for the extreme, changing conditions that exist on the Arctic OCS. The regulations will require comprehensive planning of operations, especially for emergency response and safety systems. A goal is to encourage the identification of operational risks early in the planning process and to encourage operators to plan for how to avoid and/or mitigate those risks. The requirements also aim to ensure that plans meet the challenges presented by Arctic conditions and are executed in a safe and environmentally protective manner. Effective date: 13 September 2016

[On 27 May 2015 IADC submitted comments to the docket for this NPRM]

• Oil and Gas and Sulphur Operations on the Outer Continental Shelf- Oil and Gas Production Safety Systems. (BSEE-2012-0005) (RIN 1014-AA10; 30 CFR 250) On 22 August 2013 (78 FR 52240) the BSEE issued a proposed rule to amend and update the regulations regarding oil and natural gas production by addressing issues such as: Safety and pollution prevention equipment lifecycle analysis, production safety systems, subsurface safety devices, and safety device testing. The proposed rule would differentiate the requirements for operating dry tree and subsea tree production systems on the OCS and divide the current subpart H into multiple sections to make the regulations easier to read and understand. Additionally, this proposed rulemaking would revise portions of §250.17 related to use of best available and safest technology (BAST). The intent of the change is to more closely track the BAST provision in the OCSLA. That statutory provision requires: ... on all new drilling and production operations and, wherever practicable, on existing operations, the use of the best available and safest technologies which the Secretary determines to be economically feasible, wherever failure of equipment would have a significant effect on safety, health, or the environment, except where the Secretary determines that the incremental benefits are clearly insufficient to justify the incremental costs of utilizing such technologies (43 U.S.C. 1347(b).) Comment due date: 21 October 2013

On 4 September 2013 (<u>78 FR 54417</u>) BSEE issued a correction to their previously issued proposed rule on 22 August 2013 (above)

On 27 September 2013 (<u>78 FR 59632</u>) BSEE issued an extension to the comment period. Extended comment due date: 5 December 2013.

On 7 September 2016 (81 FR 61834)) BSEE issued a <u>Final Rule</u>, which made the changes as stated in the NPRM. Effective date: 7 November 2016

DOL / Occupational Safety and Health Administration (OSHA)

• Fall Protection in Shipyard Environment. (OSHA-2013-0022). (RIN 1218-AA68; 29 CFR 1915) On 8 September 2016 (<u>81 FR 62052</u>) OSHA issued a Request for Information, which indicates that OSHA is considering revising its safety standards (last update in 1971) that address access and egress(including stairways and ladders), fall and falling object protection, and scaffolds in shipbuilding, ship repair, shipbreaking, and other shipyard related employment. OSHA plan to use the info received in all responses to determine what action, if any, it may need to undertake. Comment due date: 7 December 2016.

Department of State (DOS)

• **Passports (Public Notice: 9678)** (RIN 1400-AD97; 22 CFR 51) On 2 September 2016 (<u>81 FR 60608</u>) the Department of State issued a <u>Final Rule</u>, which updates the passport regulations to allow DOS to deny or restrict the use of passports of persons: (1) having an incorrect or invalid Social Security number on their application; (2) certified by the Secretary of the Treasury as having seriously delinquent tax debt; or (3) covered as a sex offender as defined in 42 U.S.C. 16935a, unless identified as required by 22 U.S.C. 212b. Other bases for denial or restriction of use are already defined in 22 CFR 51.60. Effective date: 2 September 2016

DOT / Federal Motor Carrier Safety Administration (FMCSA)

• Federal Motor Vehicle Safety Standards; Parts and Accessories Necessary for Safe Operation, Speed limiting Devices (FMCSA-2014-0083) (RIN 2126-AB63; 49 CFR 393) On 7 September 2016 (<u>81</u> FR 61941) FMCSA issued an NPRM, which proposes regulations that would require vehicles with a gross weight rating of more than 11,793.4 kilograms (26,000 pounds) to be equipped with a speed limiting device initially set to a speed no greater than a speed to be specified in a final rule. It would also require motor carriers operating such vehicles in interstate commerce to maintain functional speed limiting devices set to the speed specified in the final rule for the service life of the vehicle. Comment due date: 7 November 2016

DOT / Pipeline and Hazardous Materials Safety Administration (PHMSA)

• Hazardous Materials: Harmonization with International Standards (RRR)Miscellaneous Petitions for Rulemaking (RRR) (PHMSA-2015-0273) (RIN 2137-AF18; 49 CFR 107, 71, 172, 173, 176, 178, and 180). On 7 September 2016 (<u>81 FR 61741</u>) PHMSA issued an NPRM, which proposes to amend the Hazardous Materials Regulations *(HMR) to maintain consistency with international regulation and standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. PHMSA is looking to harmonize with recent changes to the IMDG Code, the ICAO Technical Instructions and the United Nations Recommendations on the Transport of dangerous Goods – Model Regulations. Commend due date 7 November 2016

EPA – Clean Water Act (CWA) and Oil Pollution Act (OPA)

• National Pollutant Discharge Elimination System (NPDES) Application and Program Updates Rule. (RIN 2040-AF25; 40 CFR 122 thru 125) This planned rulemaking by the EPA is to update specific elements of the existing NPDES in order to better harmonize regulations and application forms, improve permit documentation and transparency and provide clarifications to the existing regulations. The focus will be on revising the permit application forms to specifically include all final agency data standards, improve the consistency between the forms, update the applications to better reflect current program practices, and incorporate new program areas into the forms (*i.e.*, cooling water intake structures).

On 18 May 2016 (81 FR 31343) the EPA issued a proposed rule, which proposes revisions to the NPDES regulations to eliminate regulatory and application form inconsistencies; improve permit documentation, transparency and oversight; clarify existing regulation; and remove outdated provisions. This rulemaking would make specific targeted changes to the existing regulations and would not reopen the regulations for other specific or comprehensive revision. The proposed changes would cover 15 topics in the following major categories: permit applications; the water quality-based permitting process; permit objection, documentation and process efficiencies; the vessels exclusion; and the Clean Water Act section 401 certification processes. By modernizing the NPDES regulations, the revisions would provide the NPDES permit writers with improved tools to write well-documented permits to protect human health and the environment. The proposed revisions would also provide the public with enhanced opportunities for participation in the permitting process itself. Comment due date: 18 July 2016

On 27 June 2016 (<u>81 FR 41507</u>) the EPA extended the comment period for the notice. New comment due date: 2 August 2016

• Notice of Draft National Pollutant Discharge Elimination System (NPDES) General Permit for Eastern Portion of the Outer Continental Shelf (OCS) of the Gulf of Mexico (GEG460000); Availability of Draft Environmental Assessment. (RIN not applicable; CFR not applicable) On 18 August 2016 (<u>81 FR 55196</u>) the EPA has issued a Notice of Proposed Reissuance of the NPDES General Permit. The draft permit pertains to discharges from exploration, development, and production facilities located in and discharging, to all Federal waters of the eastern portion of the Gulf of Mexico seaward of the outer boundary of the territorial seas, and covers existing and new source facilities with operations located on Federal leases occurring in water depths seaward of 200 meters, occurring offshore the coasts of Alabama and Florida.

As proposed, this general permit includes, best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT) limitations for existing sources and new source performance standards (NSPS) limitations for new sources as promulgated in the effluent guidelines for the offshore subcategory. The draft permit also includes the following changes to the expired permit:

(1) New electronic reporting requirements;

(2) New whole effluent toxicity testing sampling and reporting requirements for well treatment, completion, and workover fluids not discharged with produced wastewaters;

(3) Requirements to submit additional information pertaining to the chemicals and additives used in well treatment, completion and workover operations; and

(4) Clarification regarding types of operators. Region 4 is also making available a Draft

Environmental Assessment (EA) for review during the 30 day public comment period for this general permit.

The Draft EA addresses potential impacts from proposed changes to the general permit, and it considers recent technical studies. Comment due date: 19 OCT 2016

EPA – Clean Air Act (CAA)

- Revisions to the Petition Provisions of Title V Permitting Program. (EPA-HA-OAR-2016-0194) (RIN 2060-AS61; 40 CFR 70) On 24 August 2016 (<u>81 FR 57822</u>) the EPA issued a NPRM, which is mainly aimed at streamlining the air permitting process related to Title V petition submissions. The vast majority of changes are administrative-based. Comment due date: 24 October 2016
- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.(EPA-HQ-OAR-2014-0866)(RIN 2060-AS43) New stationary and nonroad compression ignition (CI) engines are equipped by the engine manufacturer with emission controls to meet the Tier 4 final emission standards, which generally begin with either the 2014 or 2015 model year. Many Tier 4 final engines are equipped with selective catalytic reduction (SCR) to reduce NOx. To ensure the engine does not operate if the SCR is not working, SCR-equipped engines include design features called "inducements" that limit the engine power and eventually shut down the engine if the SCR is operated without urea, or the electronic control module cannot confirm that the SCR system is operating properly. Engine operators raised concerns regarding engines shutting down during emergencies because the inducement is triggered, for example, if the owner/operator is unable to obtain urea in the immediate aftermath of a hurricane. To address the issue for nonroad engines, EPA recently finalized amendments to the standards for new nonroad CI engines that allow the operator to override the inducements and thus avoid engine shutdown during a qualified emergency situation, which is defined as one in which allowing the inducement to shut down the engine "poses a significant direct or indirect risk to human life." This action proposes similar amendments to the standards for stationary engines.

[BACKGROUND: On 30 January 2013 the EPA issued a Final Rule (78 FR 6674) that, among other things, established management practices as an alternative to the numeric emission limits for existing diesel engines on offshore drilling vessels (MODUs), which are required to comply with 40 CFR 55 (OCS Air Regulations) on all OCS areas. The exceptions to this rulemaking include the areas where most MODU's currently operate, which are under the jurisdiction of the Department of Interior, and include the western and central portions of the Gulf of Mexico and offshore of the northern slope of Alaska. The final amendments specify that owners and operators of existing non-emergency diesel engines >300 hp on offshore drilling vessels are required to meet the below listed requirements as of 1 April 2013.

- Change the oil every 1000 hours of operation or annually (whichever occurs first)*
- Inspect and clean air filters every 750 hours of operation or annually and replace as necessary
- Inspect fuel filters and belts, if installed, every 750 hours of operation or annually and replace as necessary
- Inspect all flexible hoses every 1000 hours of operation or annually and replace as necessary *NOTE: Owners and operators can elect to use an oil analysis program to extend the oil change
- *NOTE: Owners and operators can elect to use an oil analysis program to extend the oil change requirement

Additionally, owners and operators of these diesel engines must develop a maintenance plan that specifies how the management practices will be met and keep records to demonstrate that the required management practices are being met. Effective date: 1 April 2013]

On 6 November 2015 (<u>80 FR 68808</u>) the EPA issued a proposed rule, which proposes amendments to the standards of performance for stationary compression ignition (CI) internal combustion engines to allow manufacturers to design the engines so that operators can temporarily override the emission control

system during emergency situations (reducing to Tier 1 requirements during the emergency)....where the engine or equipment it supplies is needed to protect human life. Comment due date: 21 December 2015.

On 7 July 2016 (<u>81 FR 44212</u>) EPA issued a <u>Final Rule</u>, which finalized the proposed amendments for stationary CI engines to allow the override during emergency situations. The amendments apply to engines operating during emergency situations where the operation of the engine or equipment is needed to protect human life, and to require compliance with Tier 1 emission standards during such emergencies. The EPA is also amending the standards of performance for certain stationary CI internal combustion engines located in remote areas of Alaska. Effective date: 6 September 2016

• Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector. (EPA-HQ-OAR-2010-0505) (RIN 2060-AS30; 40 CFR 60) Consistent with the White House Methane Strategy and the 14 January 2015, announcement of the EPA's approach to achieving methane and volatile organic compounds (VOC) reductions from the oil and natural gas sector, this action proposes amendments to the 2012 new source performance standards (NSPS) for this sector. In developing this action the EPA is evaluating emission sources highlighted in five white papers released in 2014. Those sources include completions of hydraulically fractured oil wells, leaks, pneumatic devices, compressors and liquids unloading operations. In addition, the EPA received several petitions for administrative reconsideration of the 2012 rule. Certain time critical issues were addressed in amendments EPA promulgated in 2013 and 2014. This action addresses the remaining issues for which EPA is granting reconsideration.

On 18 September 2015 (80 FR 56593) the EPA issued a proposed rule, which proposes to amend the NSPS to include standards for reducing methane as well as VOC emissions across the oil and natural gas source category (i.e., production, processing, transmission and storage). The EPA is including requirements for methane emissions in this proposal because methane is a GHG and the oil and natural gas category is currently one of the country's largest emitters of methane. Except for the implementation improvements and the setting of standards for methane, the proposed amendments do not change the requirements for operations already in the current standards. Comment due date: 17 November 2015.

On 3 June 2016 (81 FR 35823) the EPA issued a Final Rule. Effective date: 2 August 2016

On 18 July 2016 (<u>81 FR 46670</u>) the EPA issued a Notice with a request for information from the public to obtain info about monitoring, detection of fugitive emissions, and alternative mitigation approaches in the oil and natural gas sector. Comment due date: 15 November 2016

	Name	Company Name
Dave	Forsyth	ABS CONSULTING
William	Waldroop	BILL WALDROOP & ASSOCIATES
Ryan	Hendrix	CAMERON
Robert	Froebel	CATERPILLAR OIL & GAS
David	McKay	DNV GL
Robert	Albright	HUVRDATA LLC
John	Pertgen	IADC

Attendance:

Mathur	Minu Shikha	JCL RISK SERVICES LLC
Troy	Schwartz	LIFE CYCLE ENGINEERING
Covey	Hall	LLOYD'S REGISTER DRILLING INTEGRITY SERVICES INC
lan	McWilliam	NATIONAL OILWELL VARCO
Trent	Blackburn	NATIONAL OILWELL VARCO
Shawn	Firenza	NATIONAL OILWELL VARCO
James	Stewart	NOBLE
Heath	Davis	
Josh	Westling	PACIFIC DRILLING
Richard	Sporn	PARAGON OFFSHORE
Mike	Anatra	PARKER DRILLING
Robert	Urbanowski	PRECISION DRILLING COMPANY
Jamie	Vargas	PRECISION DRILLING COMPANY
Bobby	Warren	SEADRILL AMERICAS INC
Kevin	Warren	SEADRILL AMERICAS INC
Philippe	Herve	SPARKCOGNITION
Joshua	Robnett	SUBSEA SOLUTIONS
Jeff	Marshall	TRANSOCEAN
Joshua	Reynolds	US COAST GUARD DISTRICT EIGHT