

IMO, EPA pose regulatory challenges for offshore

AFTER 2 YEARS of effort, the International Maritime Organization's (IMO) Ship Design and Equipment (DE) Subcommittee has established the basis for most amendments of the MODU Code revision. The IMO Drafting Group at the DE Subcommittee's March 2007 meeting submitted part 1 of the report on the MODU Code amendments. Part 2 of the report is the comprehensive revisions as agreed to by the DE 50 Drafting Group, with items left for further discussion by the Intersessional Correspondence Group. The revision, directed by the IMO Maritime Safety Committee in December 2004, is a comprehensive effort to update the Code to the latest internationally accepted standards of MODU operations.

"The current MODU Code was established nearly 2 decades ago — in 1989. It has since undergone 3 amendments, but these changes were not comprehensive in nature," said **Jim Gormanson**, director of compliance of **Noble Drilling Services Inc** and chairman of the IMO Drafting Group. "As it is now, there is a disconnect between the current version of the Safety of Life at Sea Convention (SOLAS) and the MODU Code, so we're working to incorporate nearly 20 years of changes into the Code."

At the March meeting, the DE Subcommittee considered Code amendments drafted by a correspondence group. That group had been directed to base its work on a paper by Liberia, the Marshall Islands, Vanuatu and IADC and to consider comments by South Korea and the International Association of Classification Societies. Representatives from the Bahamas, Denmark, France, Liberia, the Marshall Islands, Norway, Syrian Arab Republic, United Kingdom, United States and Vanuatu, as well as the Royal Institution of Naval Architects, attended. **Alan Spackman**, vice president — offshore technical and regulatory affairs, and **John Pertgen**, assistant director - offshore technical and regulatory affairs, represented IADC.

The Code is intended to provide MODUs with a level of safety equivalent to that of cargo ships under the International Convention on the Safety of Life at Sea and International Convention on Load Lines (ICLL), both of which have seen significant revisions since 1989.

One change that had disappointed IADC was the DE Subcommittee's decision to include only non-mandatory language in the Code. However, Mr Gormanson explained, "The subcommittee is prioritizing the completion of the MODU Code amendments. Once the Code is up to date, we can address what is mandatory and what is not." Mr Gormanson served as technical adviser to the delegation of Liberia. **Tracy Royce**, compliance manager for Noble Drilling Services Inc, **Warren Weaver**, manager regulatory compliance and domestic marine operations for **GlobalSantaFe**, and **Bill Hedrick**, vice president for **Rowan Drilling**, served as technical advisers to the delegations of The Bahamas, Vanuatu and the United States, respectively.

According to Mr Weaver, the correspondence group will reconvene throughout 2007. The results of the group will be a complete draft MODU Code for submission in November 2007 to the next session of the IMO DE Subcommittee. The Subcommittee expects to complete its work on the MODU Code by the next DE session in February 2008.

OTHER IMO CHALLENGES

Aside from the MODU Code revisions, industry is likely to find itself challenged by other regulatory efforts emerging from the IMO, Mr Spackman reported. Pressure continues to grow on environmental issues, he noted.

"Even where the IMO's environmental treaties have not gained the necessary signatories to enter into force, individual governments or regional inter-governmental agreements are being used to force compliance," he said.

He cited the Ballast Water Management Convention as an example: While only 6 countries have signed on to the IMO Convention, numerous countries are demanding compliance with the IMO or similar standards as a condition of port entry. The growing divergence of approaches burdens the industry, which in turn places greater pressure on flag-state governments to accede to the international standards offered by the IMO. A major hang-up, Mr Spackman noted, is the lack of proven and approved technologies for treating ballast water to control potentially harmful or invasive species. IMO is clearly forcing the development of technology, with a looming implementation deadline of 1 January 2009 for shipowners flying the flags of signatory countries.

EPA EMISSION STANDARDS

The EPA is proposing more stringent exhaust emission standards for marine diesel engines (MDE) to significantly reduce fine particulate matter and nitrogen oxide. The proposed rulemaking, which currently excludes engines on foreign flag vessels (including MODUs), would apply the updated standards on US-flag vessels to all newly built engines below 30 liters per cylinder displacement starting in 2009. Concurrently, the EPA is seeking comments on applying these new standards to foreign-flag vessels upon entering US ports.

EPA is considering an alternative that would apply more stringent emission standards to existing MDEs when they are remanufactured. Summarily, when the engine is remanufactured, owners would be required to install a certified emissions control system, which may not fit the existing MDE footprint, as early as 2008 if available.

EPA is also proposing a long-term emission standard for newly built MDEs above 800 hp. It is to be phased in starting 2014 and is based on the application of high-efficiency catalytic after-treatment technology, which is enabled by the availability of ultra-low sulfur diesel fuel. In 2004, the EPA mandated that marine diesel fuel comply with the 15 ppm sulfur cap for ULSD by 2012. However, it is highly improbable that ULSD will be available in many locations outside the US and Europe.

ENVIRONMENT

In a manner that is prescriptive rather than goal-setting regarding noise emissions, Australia's National Offshore Petroleum Safety Authority (NOPSA) calls for compliance with the nationally agreed exposure standards for occupational noise published by the National Occupational Health and Safety Commission. In this regard, NOPSA strongly recommends that noise-monitoring surveys be carried out by the operator of each facility and that crews take baseline and follow-up hearing tests, according to **Derek Morrow**, local

Manager for **Atwood Oceanics Australia** and chairman of the IADC Australasia Chapter.

RECYCLING SHIPS

A draft Convention, now under development within IMO's Marine Environment Protection Committee (MEPC) will set standard for recycling of ships. Mr Spackman recounted this committee's long history of including fixed and floating offshore platforms as "ships" within the treaties it develops as a reason for the offshore oil and gas industry to pay attention. The Convention must find a workable balance between interests that would press for identification of a means of recycling each component of a ship and those who would disavow any responsibility for responsible disposal of a ship that has passed its economic life. The draft Convention should be completed for consideration for adoption in 2008-09.

GREENHOUSE GASSES

The MEPC has also approved a work plan and associated timetable to consider technical-, operational- and market-based methods for dealing with greenhouse gas emissions from ships. Preliminary consideration of the overall strategy will take place in June 2007, with the work to be completed in 2009. While it is acknowledged that international shipping is highly efficient in its carbon consumption, its continued existence outside a regime of regulatory controls is vexing to countries that are assuming the economic costs of imposing domestic controls. To succeed in establishing IMO standards in this area, these countries will need to convince the flag states, the majority of which are "developing countries" under the Framework Convention on Climate Change, that the imposition of controls on ships flying their flags is in their interests. How MODUs, the majority of whose emissions are attributable to the coastal state in which they operate (rather than the flag state) will be treated remains to be seen, but is an issue that will be watched carefully by IADC.

ENGINE EMISSIONS

MARPOL Annex VI, which established a program for regulating air pollution from ships, entered into force in May 2005 and has 36 states-party representing approximately 70% of the world's merchant shipping tonnage. With its engine emission standards having been developed more than 10 years ago, it is generally acknowledged that it is time to establish more stringent standards both with respect to engine certification standards and the sulphur quality of the fuels burned. Many of the world's ports suffer from air pollution problems, and for those countries that have imposed emission standards, the largely unregulated engine emissions from ships are problematic. Mr Spackman points to the regulations recently proposed by the US EPA as illustrative of what may transpire at IMO.

"The EPA is not relying on proven technology, but rather is forcing technological change through regulation. IMO, in its regulation of ballast water, has shown a willingness to use this approach and may well do so with the next generation of engine certification standards." He noted that as standards become more stringent, the engines become more sophisticated and less tolerant of variations in fuel quality. This will become problematic for drilling contractors who often must accept fuel supplied by their clients from local suppliers in developing nations. Replacement engines, too, will be a challenge, as exhaust treatment packages will likely cause future engines to have a larger footprint. ♠