

Offshore drilling environmental standards evolving

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In this first of a two-part series, Alan Spackman discusses environmental standards for offshore drilling activities.

THE NEED FOR measures to address pollution from offshore oil and gas activities has been considered by the General



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Assembly of the United Nations and, for several years, has been actively discussed within both the Commission on Sustainable Development and the International Maritime Organization. The United

Nations Convention on the Law of the Sea creates both an obligation and provides a structure for such measures, which are being developed by several United Nations' organizations.

The United Nations Commission on Sustainable Development has considered the matter and has concluded that "there is no compelling need at this time to further develop globally applicable environmental regulations in respect of the exploitation and exploration aspects of offshore oil and gas activities."

The implementation of meaningful environmental management systems by the oil companies, coupled with changes to well design and overall operational procedures may offer a means of reducing adverse environmental impacts while avoiding prescriptive regulations.

ENVIRONMENTAL REGULATION

The United Nations Open-ended Informal Consultative Process was established by the General Assembly¹ to facilitate the annual review by the Assembly of developments in ocean affairs. It held its third meeting² 8-15 April 2002. The report of this meeting makes the following recommendations with respect to offshore oil and gas activities:

The General Assembly should recommend that regional seas conventions

and action plans in regions where offshore oil and gas industries are developing or are in prospect, and where installations do not exist, should develop programs and/or measures to prevent, reduce and control pollution from offshore installations.

The General Assembly should invite regional seas conventions and action plans that have developed such programs and measures to make their information and experience available for this process.

The General Assembly should invite International Maritime Organization (IMO), United Nations Environmental Program (UNEP) and World Meteorological Organization (WMO) to undertake an initiative, involving the relevant regional organizations as well as the oil and gas industry, to develop guidance on the best environmental practices to prevent and control pollution from accidents on offshore installations and to mitigate their effects.

The United Nations Convention on the Law of the Sea (UNCLOS), which entered into force on 16 November 1994, is one of the most widely accepted of the United Nations' treaties, having been accepted by 138 nations (States party) as of 1 October 2002.

The Convention provides an overall framework for environmental governance of offshore, and to some extent onshore, oil and gas exploration and production operations. The implementation and enforcement principles of UNCLOS can be summarized as follows:

- States party must adopt laws and regulations on pollution from land-based sources and through the atmosphere, taking into account international provisions, and enforce these laws and regulations (Articles 207(1), 212(1), 213 and 222);
- With respect to seabed activities subject to national jurisdiction, States party must adopt and enforce national laws and regulations to prevent, reduce and control pollution of the marine environment arising from or in connection with seabed activities subject to their jurisdiction and from artificial islands, installations and structures under their

jurisdiction, which must be no less effective than international rules, standards and recommended practices and procedures. States are also required to endeavor to harmonize their policies at the appropriate regional level (Articles 208 and 214);

- States shall adopt laws and regulations and take other measures on pollution from seabed activities and from dumping, which shall be no less effective than international (in the case of dumping, global) rules and standards (Articles 139, 208; 209; 210, and 214);

- Coastal States are required to adopt and enforce national laws and regulations to prevent, reduce and control pollution of the marine environment from artificial islands, installations and structures under their jurisdiction. Furthermore, States must adopt measures to minimize to the fullest possible extent pollution from installations and devices used in the exploration or exploitation of the natural resources of the seabed and subsoil (Articles 194, 208 and 210);

- States should cooperate in establishing contingency plans against pollution (Article 199);

- States shall enforce this legislation within their jurisdiction (including vessels flying their flag and aircraft of their registry) and ensure that their nationals and bodies controlled by such nationals comply with the requirements applicable in the areas of the seabed that are beyond national jurisdiction, known as "the Area." (Articles 139, 208; 209; 210 and 214);

States must adopt laws and regulations on pollution from vessels that are entitled to fly their flag (Flag States) that are at least as effective as generally accepted international rules and standards. (Articles 139, 208; 209; 210 and 214).

It is noteworthy that under Articles 208, 209 and 211 of UNCLOS, there is no differentiation between international standards, recommended practices and procedures developed by inter-governmental bodies, such as the IMO, and those developed by private-sector organizations producing internationally recognized standards such as the Interna-

tional Organization for Standardization (ISO), the International Association of Oil and Gas Producers (OGP), the International Association of Drilling Contractors (IADC), and the American Petroleum Institute (API).

LAND-BASED SOURCES

A structure and action plan for addressing land-based sources of pollution was developed by the 1995 Washington Global Program of Action for the Protection of the Marine Environment from Land-based Activities.

This structure was reviewed at a subsequent meeting held in November 2001 in Montreal and is addressed in the Plan of Implementation (paragraph 32) developed at the World Summit on Sustainable Development in Johannesburg, South Africa in September 2002. The structure is reinforced by a variety of regional agreements. In the face of many other environmental issues of greater priority, little attention has been directed at the international level

towards land-based oil and gas exploration and production operations.

Industry-specific guidelines have been published by API.³

OFFSHORE ACTIVITIES

Under UNCLOS, exploitation of seabed mineral resources is subject to the exclusive control of the adjacent coastal State out to the limit of its exclusive economic zone, or the limit of its continental shelf, if the continental shelf extends beyond 200 miles.

In 1996, the United Nations Commission on Sustainable Development (CSD) concluded that "there is no compelling need at this time to further develop globally applicable environmental regulations in respect of the exploitation and exploration aspects of offshore oil and gas activities"⁴.

Further, it was concluded that that "the primary focus of action on the environmental aspects of offshore oil and gas

operations continues to be at the national, sub-regional and regional levels," and noted that in support of such action, there was a need to share information on the development and application of satisfactory environmental management systems".⁵

Thirteen "Regional Seas" programs⁶ have been established under the auspices of UNEP, involving more than 140 nations. Two other regional programs are based on free-standing Conventions: The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention); and Convention for the Protection of the Marine Environment of the Baltic Sea (Helsinki Convention).

In addition, a high-level intergovernmental forum, the Arctic Council, has been established to address the mutual concerns faced by the Arctic governments and indigenous populations.

While no global measures have been adopted regulating the discharges

directly arising from the exploration, exploitation and associated offshore processing of oil and gas, harmonized regulations with respect to the exploration and exploitation of oil and gas have been developed as part of the Baltic, Mediterranean, North East Atlantic and Kuwait regional programs and under the Arctic Council.

The matter has been considered by other regional programs; however, in general, they have decided that other issues should be given higher priority.

OGP has issued industry-specific guidelines for operations in tropical rainforests, onshore areas in arctic and sub-arctic areas, arctic offshore regions, mangrove areas, and in "sensitive" environments.⁷

The regional programs also offer a means for inter-governmental exchanges on regulatory practice and experiences, including exchange of information on best environmental practice.

The UNEP maintains a website⁸ to facilitate the exchange of such information as it relates to offshore oil and gas exploration and production.

ACTIVITIES IN THE AREA

Under article 209 of UNCLOS, the development of seabed mineral resources in areas beyond national jurisdiction (i.e., "the Area") is subject to control by the International Seabed Authority (ISBA).

The ISBA has directed its efforts toward developing regulations for prospecting and exploration for polymetallic nodules, since this is the limit of current commercial interest.

However, the ISBA has noted the potential for hydrocarbon and gas hydrates in areas where there is a potential claim for a continental shelf extending beyond 200 nautical miles, including the Atlantic seaboard of North and South America (including the Labrador Sea), and the Alaskan Arctic seaboard.⁹

The Authority acknowledges that development potential for these resources is currently marginal, but notes that technological improvements in recovery efficiency and greater access to deep-water areas are increasing the range of economically recoverable resources.

AT SEA DISPOSAL (DUMPING)

The dumping of wastes at sea is governed by the 1972 London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter. Seventy-eight nations have ratified or acceded to the London Convention.

This agreement has been revised and amended by its 1996 Protocol; 16 nations have ratified or acceded to the 1996 Protocol.

The Protocol has not entered into force; however, it has been reported that it may enter into force as early as 2003.¹⁰

The Protocol introduces a wider definition of dumping than that contained in UNCLOS. It includes within the definition the expressions "any storage of wastes or other matter in the seabed and the subsoil thereof from vessels, aircraft, platforms or other man-made structures at sea" and "any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of deliberate disposal".

The London Convention and Protocol exempt the disposal into the sea of "wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea; the placement of matter for the purpose other than the mere disposal thereof, and the disposal or storage of wastes or other matter directly arising from, or related to the exploration, exploitation and associated offshore processing of seabed mineral resources."

This exemption leaves considerable opportunity for divergence of interpretation with regard to what constitutes "normal operations" of offshore oil and gas drilling and production facilities, which some find troublesome.

The Netherlands has recently proposed that consideration be given to expanding the London Convention to explicitly include a wide variety of issues associated with offshore oil and gas activities¹¹, specifically:

- Seabed activities;
- Sub-seabed activities;
- Offshore platforms (discharges, removal and disposal); and

- Matters related to past dumping activities (recovery of wastes dumped in other marine engineering activities (e.g., OTEC, artificial islands).

A number of technical reports and guidance documents have been produced by OGP on the issue of decommissioning offshore oil and gas installations.¹²

FOOTNOTES

1 Report of the Special Committee on the Charter of the United Nations and on the Strengthening of the Role of the Organization, A/54/33 (1999).

2 Report on the work of the United Nations Open-ended Informal Consultative Process established by the General Assembly in its resolution 54/33 in order to facilitate the annual review by the Assembly of developments in ocean affairs at its third meeting, A/57/80 (2 July 2002).

3 API RP 52, "Land Drilling Practices for Protection of the Environment."

4 United Nations Commission on Sustainable Development, CSD Decision 4/15, paragraph 26

5 CSD Decision 7/1, paragraph 3(a)

6 Black Sea, Caribbean, East Asian Seas, East African, Kuwait, Mediterranean, North West Pacific, Red Sea and Gulf of Aden, South Asian Seas, South East Pacific, South Pacific, South West Atlantic, and West and Central Africa

7 See <http://www.ogp.org/publications/index/html>

8 <http://www.oilandgasforum.net/>

9 Report of the Secretary-General of the International Seabed Authority under article 166, paragraph 4, of the United Nations Convention on the Law of the Sea, ISBA/8/A/5, (7 June 2002)

10 IMO, Report of the Twenty-Third Consultative Meeting of the Contracting Parties to the London Convention, LC 23/16 (10 December 2001)

11 IMO Future Work Program, "Future objectives for the London Convention 1972 and the 1996 Protocol thereto," Submission by the Netherlands, LC 24/14 (9 August 2002)

12 See <http://www.ogp.org/publications/index/html>