PETROLEUM

PETROLEUM (OFFSHORE ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL) REGULATIONS

(SECTION 52)

[Commencement 15th July, 2016]

1. These Regulations may be cited as the Citation. Petroleum (Offshore Environmental Protection And Pollution Control) Regulations.

In these Regulations — 2. Interpretation.

"Act" means the Petroleum Act;

"Administration" means the relevant agency of the government of the State—

- (a) within whose jurisdiction an offshore installation is operating; or
- (b) whose flag the offshore installation is entitled to fly;

"Bahamas maritime jurisdiction" means —

- (a) the internal and archipelagic waters and territorial seas; and
- (b) the exclusive economic zone and continental shelf as defined in the Archipelagic Waters and Maritime Jurisdiction Act:

"best practicable option" means the best method of preventing or minimizing adverse effects on the environment having regard to inter alia-

- (a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects:
- (b) the financial implications and the effects on the environment of that option when compared with other options; and
- (c) the current state of technical knowledge and the likelihood that the option can be successfully applied;
- "cuttings" means solid material removed from drilled rock together with any solids and liquids derived from any adherent drilling fluids:

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- "discharge" means any escape, release, disposal, spilling, leaking, pumping, emitting or emptying excluding release of hazardous substances for the purpose of legitimate scientific investigation or re-injection into geological formations;
- "dispersant" means any substance used or intended to be used for the dispersal or emulsification of an oil spill in the sea;

"EIA" means an Environmental Impact Assessment;

"EMP" means an Environmental Management Plan;

"garbage"-

- (a) means all food waste, domestic waste, operational waste, plastic waste, cargo residue, incinerator ash, cooking oil, fishing gear, and any other waste generated during routine operation of a facility;
- (b) does not include—
 - (i) fresh fish or parts of fresh fish;
 - (ii) any substance defined or listed in any Annex to MARPOL other than Annex V;

"GMP" means Garbage Management Plan;

"hazardous substance" means-

- (a) a substance which falls into one of the following categories
 - (i) substances or groups of substances that are toxic, persistent and liable to bioaccumulate;
 - (ii) other substances or groups of substances which are assessed by the flag State as requiring a similar approach as substances referred to in
 (i) even if they do not meet all the criteria for toxicity, persistence and bioaccumulation, but which give rise to an equivalent level of concern; and
 - (iii) any solution containing substances categorised under paragraph (a)(i) or (a)(ii) above;
- (b) oil;

- "IOPP Certificate" means an International Oil Pollution Prevention Certificate issued under MARPOL Annex I;
- "marine oil spill" means any actual or probable release, discharge or escape of oil into the marine environment within The Bahamas' maritime jurisdiction;
- "MARPOL" means the International Convention for the Prevention of Pollution for ships 1973, as modified by the Protocol of 1978 relating thereto; and includes any subsequent protocol, amendment or revision thereto, as accepted or ratified by the Commonwealth of The Bahamas;
- "Minister" unless otherwise stated, means the Minister responsible for Petroleum;
- "National Plan" means the National Oil Spill Contingency Plan;

"non-aqueous drilling fluids or a NAF" means oilbased and synthetic based drilling fluids;

"oil" means-

- (a) petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products; and
- (b) any oily mixture;
- "oil-based drilling fluids" or "OBF" means those liquids, used in drilling operations to cool and lubricate the bit and to control well pressure, where the continuous phase and suspended medium for solids is a water immiscible fluid that is oil-based (normally low aromatic and paraffinic oils);
- "oil spill" means any actual or probable release, discharge or escape of oil;

"oily mixture" means a mixture with any oil content;

"ORB" means Oil Record Book;

"OSPAR" means the OSPAR Commission, being the forum through which the contracting parties to the Convention for the Protection of the marine Environment of the North-East Atlantic (otherwise known as the OSPAR Convention) cooperate;

- "produced water" means water which is produced in petroleum operations and includes formation water, condensation water and re-produced injection water; it also includes water used for desalting oil;
- "Recognised Organisation" means an organisation authorised by the flag State of the offshore installation—
 - (a) in accordance with—
 - International Maritime (i) the Organisation (IMO) Assembly A.739(18) Resolution and the Appendices thereto. entitled "Guidelines for the Authorization of Organizations Acting on Behalf of the Administration": or
 - (ii) the IMO Maritime Safety Committee Resolution MSC.349(92) and the Appendices thereto, entitled "Code for Recognized Organisations (RO Code)"; and
 - (b) that is responsible for the undertaking of survey, audit and inspection functions under the relevant international Conventions;
- "substance" means a chemical element or compound or a mixture or solution composed of two or more elements or compounds;
- "surveyor" means a surveyor employed by a Recognised Organisation; and
- "synthetic-based drilling fluid" or "SBF" means those liquids, used in drilling operations to cool and lubricate the bit and to control well pressure, where the continuous phase and suspended medium for solids is a water immiscible fluid which comprises highly refined mineral oil-based fluids or fluids derived from vegetable and animal sources;
- "water-based drilling fluids" or "WBF" means those liquids, used in drilling operations to cool and lubricate the bit and to control well pressure, where the continuous phase and suspended

medium for solids is a sea water or a water miscible fluid.

PART I - ENVIRONMENTAL AUTHORISATION

3. (1) Notwithstanding any instrument or approval granted under any other enactment, no person shall undertake any of the following operations without the grant of an environmental authorisation by the Minister —

- (a) appraisal for petroleum other than geological and geophysical (including seismic) surveys;
- (b) exploration;
- (c) field development and production;
- (d) abandon a well; and
- (e) decommission a facility.

(2) An application for an environmental authorisation specified in paragraph (1) shall include—

- (a) an EIA; and
- (b) an EMP.

4. (1) Every application for an environmental authorisation shall—

Application for an environmental authorisation.

- (a) be in English;
- (b) be in writing or in such other form as the Minister may allow;
- (c) include the applicant's—
 - (i) address for service in The Bahamas;
 - (ii) telephone number;
 - (iii) fax number, if any;
 - (iv) email address, if any;
- (d) be made
 - (i) no less than at least three months before the date on which the operations are due to commence or the existing approval expires; or
 - (ii) within such lesser period as the Minister considers appropriate;
- (e) include the contents of the E1A and a corresponding EMP in
 - (i) hard copy; and
 - (ii) an electronic form acceptable to the Minister;

Environmental authorisation.

(f) include evidence of compliance with regulation 5.

(2) Within no later than thirty working days from the date of receipt of an application for the grant of an environmental authorisation, the Minister may, in writing, require an applicant to submit any additional information that is considered necessary in support thereof.

(3) In accordance with paragraph (2) the Minister shall state—

- (a) the details of the additional information that is required; and
- (b) the reason for the requisite information.

5. Before an application for an environmental authorisation is submitted, the Minister shall satisfy himself that the operations of the holder of an instrument shall satisfy the requirements of—

- (a) the Ministry responsible for the Environment;
- (b) the Department of Marine Resources;
- (c) the Port Department;
- (d) members of the National Oil Spill Committee;
- (e) the Royal Bahamas Defence Force;
- (f) the Bahamas National Trust; and
- (g) any other persons whose interests in the vicinity of the proposed offshore installation are likely to be affected by the operation thereof.

6. (1) The Minister may grant an environmental authorisation in accordance with the Act, upon such terms and conditions as may be determined.

(2) Any environmental authorisation granted by the Minister shall be granted for a period not exceeding three years.

PART II - ENVIRONMENTAL IMPACT ASSESSMENT

7. An EIA submitted to the Minister in accordance with regulation 4 shall be prepared by the operator in accordance with the First Schedule and contain the information specified therein in such detail —

(a) as corresponds to the scale and significance of the impacts that the operations may have on the environment and existing interests; and

Approval and duration of an environmental authorisation.

Consultation.

Contents of an environmental impact assessment. (b) to enable the Minister to understand the nature of the operations and its impacts on the environment and existing interests.

8. (1) No modification or change shall be made to an existing operation in respect of which an environmental authorisation was granted by the Minister without prior approval by the Minister in writing, subject to an application in accordance with regulation 4, irrespective of whether or not the change arises from an increase or decrease in the intensity of an existing operation, or from the addition of an operation, or arises from the decommissioning of a facility, or otherwise.

(2) Subject to paragraph (1) and where the Minister considers that significant change to the environmental impact of the operation will result from a modification or change of the existing operation, the operator shall be required to prepare and submit a separate EIA related thereto.

PART III - ENVIRONMENTAL MANAGEMENT

9. (1) All operations for which an environmental authorisation is granted in accordance with regulation 6 shall be managed in accordance with an Environmental Management System.

- (2) An Environmental Management system shall —
- (a) be consistent with ISO 14001, as may be amended from time to time; and
- (b) comply with other similar internationally recognised standards.

(3) A key component of an Environmental Management System shall be the development and implementation of an EMP.

10. (1) No person may operate an offshore installation without an EMP approved as part of the environmental authorisation required under regulation 3.

(2) At all times, an operator shall be deemed to be bound by the EMP as a condition of the grant of environmental authorisation.

11. An EMP shall include but shall not necessarily be limited to the particulars prescribed in the Second Schedule, and shall —

Environmental management systems.

Requirement for an environmental management plan.

Contents of an environmental management plan.

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Modification or changes to existing operations.

- (a) be appropriate for the nature and scale of the activity;
- (b) demonstrate that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable;
- (c) demonstrate that the environmental impacts and risks of the activity will be of an acceptable level;
- (d) provide for appropriate environmental performance outcomes, environmental performance standards and measurement criteria;
- (e) include an appropriate implementation strategy and monitoring, recording and reporting arrangements; and
- (f) demonstrate that
 - (i) the operator has carried out the consultations required by regulation 5; and
 - (ii) the measures, if any, that the operator has adopted, or proposes to adopt, because of the consultations are appropriate.

12. Every operator shall keep the EMP and environmental authorisation, at all times —

- (a) in a secure place on every offshore installation to which they apply;
- (b) at a separate address nominated for the offshore installation; and
- (c) to be readily available for inspection by the Minister.

13. (1) No modification or change shall be made to an EMP, without prior approval by the Minister, in writing, subject to an application in accordance with regulation 4 and regulation 11, save and except that if the only modification applied for is for the use of a hazardous substance, only particulars related thereto shall be required to be submitted in respect of the Second Schedule.

(2) Modification or change to an EMP includes *inter alia*, when the operator proposes to —

(a) alter the use or layout of the facility in such a way that could increase the risk of environmental damage arising from the operation; or

Custody of an environmental management plan.

Modification or change to an environmental management plan.

Second Schedule.

(b) use a hazardous substance not approved in the EMP

14. (1) Regular and effective monitoring shall be undertaken by the operator —

- (a) to assess the impacts of the operations, including the verification of predicted impacts;
- facilitate early detection of possible (b) to unforeseen effects of activities carried out both within and outside The Bahamas' maritime iurisdiction on the marine environment:
- (c) to comply with any other directives of the Minister or the Minister responsible for the environment, in accordance with the Act and the law

(2) Subject to paragraph (1), the operator shall maintain records of all monitoring activity under the Act, which shall be made available for inspection by the Minister at any time.

15. (1) No person may operate a facility without prior approval by the Minister in writing, of pollution emergency response procedures.

Pollution emergency response procedures.

pollution (2) Subject to paragraph (1), the emergency response procedures may be submitted -

- (a) as a separate Oil Pollution Emergency Plan; or
- (b) as an integral part of the EMP required pursuant to regulation 10.

(3) The pollution emergency response procedures shall include the particulars prescribed in the Third Third Schedule. Schedule of these Regulations.

(4) At all times, with respect to the implementation of pollution emergency response procedure, the operator shall —

- (a) ensure that personnel responsible for implementing the approved pollution emergency response procedures and dealing with spills of oil and other hazardous substances receive training appropriate to their responsibilities;
- (b) maintain a record of all training;
- maintain access to equipment to deal with a (c) spill, at a level appropriate to —
 - (i) the risks presented by the facility; and

Environmental monitoring.

Modification or

change to

pollution emergency

response

procedures.

- (ii) the response options identified in the approved pollution emergency response procedures; and
- (d) when called upon by the Minister, or another statutory agency, justify any response option, identified in the pollution emergency response procedures, as effective and achievable.

16. (1) Save and except as provided in paragraph (2), no modification or change shall be made to pollution emergency response procedures, without prior approval by the Minister, in writing, subject to an application by the operator in writing.

(2) The following changes to the pollution emergency response procedures may be made without prior approval of the Minister, in writing —

- (a) modifications to the twenty-four hour contact list;
- (b) reassignment of personnel responsibilities.
- **17.** (1) Every operator shall —
- (a) test the pollution emergency response procedures no less than once every twelve months;
- (b) review the effectiveness of the pollution emergency response procedures as soon as practicable after —
 - (i) every test carried out under paragraph (a);
 - (ii) every application of the pollution emergency response procedures in response to a spill; and
 - (iii) any change in the pollution emergency response procedures or equipment for the site, other than the direct replacement of equipment.

(2) Every operator shall prepare and maintain a record of —

- (a) every test and review made under paragraph (1);
- (b) the results and findings of every such test and review; and
- (c) such other particulars as considered relevant.

(3) Following every review of the pollution emergency response procedures, the operator shall —

Testing and reviewing the pollution emergency response procedures.

- (a) devise and prepare further modifications or changes to the pollution emergency response procedures that would increase its effectiveness; and
- (b) implement such modifications or changes
 - (i) immediately, in the case of modifications to the twenty-four hour contact list or reassignment of personnel responsibilities; or
 - (ii) on the approval of the Minister.

PART IV - DUTIES RELATED TO OFFSHORE INSTALLATIONS

18. (1) Every operator shall ensure that no v petroleum is continuously vented or flared from an f offshore installation, save and except unless such venting or flaring is —

Venting and flaring of petroleum.

- (a) specified in the approved EMP for that offshore installation; and
- (b) released in accordance with the said EMP.

(2) Where petroleum is vented or flared on an offshore installation in accordance with paragraph (1), the operator shall prepare and maintain a record of such emissions, including —

- (a) volume vented or flared;
- (b) volume of liquids burned;
- (c) duration of the emission;
- (d) the reasons for the emission; and
- (e) the wells contributing.

(3) Where petroleum is vented, flared or released into the atmosphere, save and except as provided under the Act and without prior approval by the Minster, the operator shall notify the Minister immediately and within no less than twenty-four hours —

- (a) in writing;
- (b) with the highest possible priority; and
- (c) in accordance with the reporting requirements under the EMP.

19. Every operator shall ensure that no hazardous substance is discharged from an offshore installation, unless that hazardous substance is —

Discharge of hazardous substances other than oil.

- Permitted discharges of produced water, ballast water and offshore processing drainage.
- (a) specified in the approved EMP for that offshore installation; and
- (b) discharged in accordance with the said EMP.

20. (1) Every operator shall, by use of the best practicable option, ensure that the dispersed oil content of produced water, ballast water or offshore processing drainage discharged from an offshore installation —

- (a) is measured
 - (i) by a method approved by the Minister in the EMP;
 - (ii) at least sixteen times per calendar month, at regular intervals of approximately once every two days; and
 - (iii) at a point immediately after the last item of treatment equipment in, or downstream of, a turbulent region, and in any case before any subsequent dilution;
- (b) does not exceed forty milligrams per litre;
- (c) averages less than thirty milligrams per litre every calendar month; and
- (d) is recorded.

(2) Where an operator is unable to comply with paragraph (1) by use of the best practicable option, an application may be made to the Minister in writing and the Minister in consultation with the Minister responsible for the Environment may—

- (a) authorise the discharge;
- (b) require the operator to adopt additional measures to prevent possible pollution of the marine environment; and
- (c) take such other steps as he deems necessary.

(3) For the purposes of paragraph (1)(b), an application may be made to the Minister in writing and the Minister in consultation with the Minister responsible for the environment, may allow a limit greater than forty milligrams per litre if it considers it necessary for geological, technical or safety reasons.

(4) If the dispersed oil content of production water, displacement water or offshore processing drainage exceeds —

(a) forty milligrams per litre but does not exceed one hundred milligrams per litre, the operator

shall report the excess to the Minister as soon as practicable;

(b) one hundred milligrams per litre, the operator shall report the excess as a marine oil spill in accordance with regulation 21 below.

(5) The Minister may, at any time, require that the dispersed oil content, of an offshore installation's produced water, ballast water or offshore processing drainage, be measured without delay.

21. (1) Subject to the requirements in paragraph (2), every operator shall ensure that no drilling fluid is used on an offshore installation unless that fluid is -

Use and discharge of drilling fluids.

- (a) water-based or synthetic-based;
- (b) specified in the offshore installation's approved EMP; and
- (c) discharged in accordance with that EMP.

(2) Upon an application to the Minister in writing, the Minister may allow the use of drilling fluid that is not water based or synthetic based if its use is reasonably necessary for geological, technical or safety reasons.

(3) For the purposes of these Regulations, the following performance standards shall apply —

- (a) the use of diesel oil-based fluid is prohibited;
- (b) the use of NAF in the upper part of the well is not permitted unless their use is necessary for geological or safety reasons;
- (c) the discharge of whole NAF and cuttings contaminated with NAF at a concentration greater than 1% fluid by weight on dry cuttings, is prohibited; and
- (d) the mixing of NAF with cuttings to achieve this standard for the purpose of disposal is not acceptable.

(4) Notwithstanding the requirements set out in paragraph (2), the Minister may allow the discharge of cuttings contaminated with synthetic based fluid at a concentration greater than 1% fluid by weight on dry cuttings in exceptional circumstances, provided it can be demonstrated in the EMP that —

(a) there is no alternative to the use of synthetic based fluid; and

(b) the discharge of cuttings contaminated with synthetic based fluid is the best practicable option for their disposal.

(5) Where oil based fluid and synthetic based fluid are used, the offshore installation shall have a containment and drainage system which allows the collection and treatment of all run off water which may be contaminated with drilling fluids or their by-products.

22. (1) No operator shall discharge garbage from a facility into the sea except food garbage that -

- (a) has passed through a comminuter or grinder; and
- (b) is capable of passing through a screen with openings no greater than 25mm².

(2) Nothing in this regulation shall prohibit or restrict an operator from discharging garbage from a facility into the sea if the discharge —

- (a) is necessary for the purpose of securing the safety of a facility and those on-board or saving life at sea; or
- (b) is an accidental loss of garbage resulting from damage to a facility or its equipment, and all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimise the accidental loss.

(3) Every operator shall ensure that any garbage that is not permitted to be discharged into the sea is -

- (a) retained on board the facility; or
- (b) discharged to a reception facility.

23. (1) Every operator of an offshore installation shall ensure that, at all times —

- (a) the facility has a Garbage Management Plan (hereinafter referred to as "GMP") in compliance with this regulation and the Act;
- (b) an up to date copy of the GMP is carried on board the facility; and
- (c) all persons on board the facility comply with the GMP.
- (2) A GMP shall —
- (a) set out in writing, the procedures for minimising, collecting, storing, processing, and disposing of

Permitted discharge of garbage from facilities.

Garbage Management Plan. garbage, including the use of garbage related equipment on board;

- (b) designate the person or persons in charge of carrying out the plan; and
- (c) be written in the English language and in the language of the crew.

24. Every operator of an offshore installation shall ensure that, at all times —

Garbage Record Book.

- (a) for each discharge of garbage, there is a garbage record book for the offshore installation that is
 - (i) carried on board the facility;
 - (ii) readily available for inspection by the Minister;
- (b) for each discharge of garbage, and each completed incineration of garbage, an entry is promptly made in the garbage record book that includes
 - (i) the date and time of the discharge or incineration;
 - (ii) the position of the offshore installation at the time of the discharge or incineration;
 - (iii) the category of the garbage discharged or incinerated;
 - (iv) the estimated amount of garbage discharged or incinerated; and
 - (v) the signature of the officer in charge of the discharge or incineration;
- (c) for each discharge or accidental loss referred to in regulation 22(2), an entry is made in the garbage record book that includes —
 - (i) the location, circumstances of, and reasons for the discharge or accidental loss;
 - (ii) details of the items discharged or accidental loss; and
 - (iii) the reasonable precautions taken to prevent or minimise such discharge or accidental loss.

(2) Each completed page of the garbage record book shall be signed by the facility manager.

(3) The garbage record book required by paragraph (1) shall be preserved by the operator of the facility for a

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period no less than twenty-four months after the last entry has been made 25. Oil that drains from the machinery spaces, oil Permitted discharges of oil. tanks and other parts of the facility may be discharged, if-(a) the oil content of the discharge without dilution does not exceed fifteen parts per million; and (b) the facility has in operation the equipment required by regulation 27. 26. Every operator shall ensure that any oil residue Oil residues that that is not permitted to be discharged into the sea is discharged. (a) retained on board the facility: (b) off loaded as cargo; or (c) discharged to a reception facility. 27. (1) Every operator of an offshore installation Oil filtering shall ensure that it is fitted with oil filtering equipment — (a) of a design approved by the Minister or the Administration of another state party to MARPOL: and (b) to ensure that any oily mixture that drains from the machinery spaces, oil tanks (i) and other parts of the facility or from ballasting to cleaning of the oil fuel tanks; and (ii) is discharged into the sea, has an oil content not exceeding fifteen parts per million, after passing through the equipment. (2) In the case of a facility of ten thousand gross tons or more, the oil filtering equipment provided in accordance with paragraph (1) shall be fitted with — (a) an alarm to indicate when the oil content of the effluent exceeds fifteen parts per million; and (b) a device to ensure that any discharge of oily mixture is automatically stopped when the alarm is activated. (3) The requirements of paragraphs (1) and (2) shall not apply if the Minister is satisfied that oily mixtures —

- (a) can be adequately stored on board and subsequently discharged to reception facilities ashore or otherwise satisfactorily disposed of without being discharged into the sea; and
- (b) are so stored and discharged or disposed.

cannot be

equipment.

Sludge tanks.

28. Every operator of an offshore installation shall ensure that it is fitted with tanks —

- (a) large enough to hold all oily residues that cannot otherwise be dealt with in accordance with the Act; and
- (b) designed and constructed so as to allow the tanks to be cleaned and emptied at a reception facility.

29. (1) Every operator shall ensure that an Oil Record Book (hereinafter referred to as "ORB") is maintained in respect of the facility in a form approved by—

- (a) the Minister; or
- (b) the Administration of another state party to MARPOL.

(2) Every operator shall ensure that an entry is made in the appropriate part of the ORB in accordance with the applicable provisions of MARPOL in respect of the —

- (a) ballasting or cleaning of oil fuel tanks;
- (b) discharge of dirty ballast or cleaning water from oil fuel tanks;
- (c) discharge overboard or other disposal of oily water that has accumulated in machinery spaces or other parts of the facility;
- (d) loading of oil;
- (e) internal transfer of oil;
- (f) unloading of oil;
- (g) ballasting of produced oil storage tanks;
- (h) cleaning of produced oil storage tanks;
- (i) discharge of dirty ballast or cleaning water from oil storage tanks;
- (j) measurement of the discharge of production water, ballast water or processing drainage, in accordance with regulation 20(1), and if the oil content exceeds one hundred parts per million, measurement of —
 - (i) the volume of oil discharged during the incident; or
 - (ii) for continuing incidents, the volume of oil discharged in every twelve hour period that the discharge continues;
- (k) disposal of oily residues.

Oil Record book

(3) Every operator shall ensure that the daily volume in litres of discharged production water, displacement water or processing drainage is recorded in the ORB.

(4) Every operator shall ensure that a statement is made in the ORB of the circumstances of, and the reasons for —

- (a) any discharge into the sea of oil for the purpose of—
 - (i) securing the safety of the facility; or
 - (ii) saving life at sea;
- (b) any escape into the sea of oil resulting from—
 - (i) damage to the facility or its equipment; or
 - (ii) any other accidental or exceptional occurrence;
- (c) any discharge into the sea of substances containing oil when being used for the purpose of combating a specific pollution incident.

(5) Every entry or statement required to be made in the ORB, shall be—

- (a) recorded in writing, without delay;
- (b) signed by the facility manager in charge of the operation concerned; and
- (c) in English.

(6) Every completed page of the ORB shall he signed by the facility manager on board the facility who has overall responsibility for its operations.

(7) Every operator shall ensure that the ORB is kept at all times —

- (a) in a secure place on board every offshore installation to which it applies, except in the case of an unmanned offshore installation under tow; and
- (b) at a separate address nominated for the offshore installation; and to be readily available for inspection by the Minister.

(8) Every operator shall ensure that a true copy of every completed page of the ORB is forwarded to the Minister within fifteen working days of the end of the month in which it was completed. (9) Every ORB shall be preserved by the operator for a period no less than three years after the last entry is made.

30. (1) After any spill of oil or other hazardous substance to the marine environment, the operator of a facility shall report to and notify the Minister immediately and in writing, within no less than twenty-four hours —

Reporting of spills.

- (a) with the highest possible priority;
- (b) in accordance with the reporting requirements set out from time to time in the national oil spill contingency plan; and
- (c) in compliance with any reporting procedures as set out in the pollution emergency response procedures.

(2) If the personnel responsible for implementation of pollution emergency response procedures considers that a marine oil spill cannot be contained or cleaned up using available resources available, the Minister shall be notified immediately and in writing, within no less than twenty-four hours —

- (a) with the highest possible priority; and
- (b) states the procedures outlined in the pollution emergency response procedures.

(3) Every operator shall ensure that any report made to the Minister pursuant to paragraph (1), is submitted immediately and with no less than forty-eight hours to the authorised organisation that issued the International Oil Pollution Prevention Certificate as required in regulation 31 in respect of the offshore installation.

PART V - INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

31. (1) In respect of every offshore installation, every operator shall obtain and maintain, a valid International Oil Pollution Prevention Certificate —

Offshore installation to have an IOPP Certificate.

- (a) issued or renewed in accordance with regulation 34; or
- (b) issued by or on behalf of a state which is a party to MARPOL other than The Bahamas.

(2) Every operator shall ensure that the IOPP Certificate held in respect of the offshore installation is, at all times —

- (a) in a secure place on board every offshore installation to which it relates; and
- (b) at a separate address nominated for the offshore installation,

to be readily available tor inspection by the Minister.

Application for IOPP Certificate.

- **32.** Every application by an operator for the —
- (a) issue of an IOPP Certificate;
- (b) renewal of an IOPP Certificate; or
- (c) endorsement of an IOPP Certificate,

shall be made, in writing to the Minister, in compliance with regulation 34 and the Act.

33. (1) The operator of an offshore installation shall ensure that the following surveys are carried out by a surveyor in respect of such offshore installation —

- (a) an initial survey, prior to issue of an IOPP Certificate;
- (b) a renewal survey, prior to renewal of an IOPP Certificate; and
- (c) an endorsement survey, prior to endorsement of an IOPP Certificate.

(2) Initial and renewal surveys of an offshore installation, conducted prior to the issue or renewal of an IOPP Certificate shall be carried out to ensure that the structure. equipment. systems. piping. fittings. record books. emergency arrangements. response procedures and material fully comply with the requirements of the Act.

(3) Notwithstanding paragraph (1), the operator shall conduct an annual survey in respect of the offshore installation to ensure that —

- (a) the structure, equipment, systems, piping, fittings, arrangements, record books, emergency response procedures and material, associated pump and piping systems, including oil discharge monitoring and control systems, oily water separating equipment and oil filtering systems are in good working order and fully comply with the requirements of the Act;
- (b) the structure, equipment, systems, piping, fittings, arrangements, record books, emergency response procedures and material have not been

Surveys and inspections prior to the issue, renewal or endorsement of an IOPP Certificate altered without the prior approval in writing, of the Minister or a surveyor as required.

(4) A surveyor may consent, in writing to an application for the issue, renewal or endorsement of an IOPP Certificate —

- (a) unconditionally; or
- (b) subject to such conditions as the surveyor sees fit,

in the interests of maritime safety and marine environment protection.

34. (1) In accordance with the Act and upon application, the Minister may issue, renew or endorse an IOPP Certificate, if satisfied that the facility—

Issue, duration, renewal, etc. of an IOPP Certificate.

- (a) complies with the Act; and
- (b) has undergone such requisite survey in accordance with regulation 33 and to the satisfaction of and with written consent of the surveyor.

(2) Every IOPP Certificate, including any supplement thereto —

- (a) shall be in the form prescribed
 - (i) in MARPOL Annex 1 Appendix II, as may be amended; or
 - (ii) if an FPSO or an FSU supplement, either in that form or in the form specified in resolution MEPC. 139(53) "Guidelines for application of the revised MARPOL Annex I requirements to FPSOs and FSUs" as may be amended by the International Marine Organisation from time to time;
- (b) may be issued for a period not exceeding five years; and
- (c) is subject to the following conditions—
 - (i) no significant alterations may be made in the structure of the facility, equipment, systems, fittings, arrangements and material without the approval of a surveyor, except the direct replacement of such equipment and fittings;
 - (ii) the satisfactory completion of the surveys required under regulation 33(1);
 - (iii) the facility has on board the ORB; and

(iv) the facility has on board an approved EMP.

(3) The operator of an offshore installation shall ensure that, at all times the equipment thereof is maintained in a condition that—

- (a) complies with the provisions of the Act;
- (b) complies with its IOPP Certificate; and
- (c) does not present an unreasonable threat of harm to the marine environment.

35. (1) In response to an application for the renewal or endorsement of an IOPP Certificate and where a surveyor has carried out a renewal survey or annual survey of a facility and determines that the condition of the equipment of the facility—

- (a) does not correspond substantially with the particulars of the IOPP Certificate; or
- (b) presents an unreasonable threat of harm to the marine environment, the surveyor shall—
 - (i) immediately notify the operator in writing and instruct the operator to take corrective action;
 - (ii) notify the Minister in writing of the corrective action required; and
 - (iii) not consent to an application to the Minister for the renewal or endorsement of the IOPP Certificate.

(2) Where an operator fails to undertake corrective action required pursuant to paragraph (1), the Minister may—

- (a) suspend the IOPP Certificate; or
- (b) impose conditions on the IOPP Certificate.

(3) The suspension of an IOPP Certificate, or the imposition of any conditions in respect thereof, shall remain in force until the Minister has confirmed —

- (a) that after due investigation, the requisite corrective action was undertaken by the operator;
- (b) to approve the application for renewal or endorsement of an IOPP Certificate.

(4) Pursuant to paragraph (3), the Minister shall determine the period of time during which the IOPP

Failure to meet standards required for renewal or endorsement of an IOPP Certificate. Certificate shall be suspended, or within which conditions are imposed thereon.

36. After a surveyor conducts a survey in accordance with the Act and for the purposes of an application to the Minister for the issue, renewal or endorsement of an IOPP Certificate, the operator shall ensure that no change is made to an offshore installation structure, equipment, systems, fittings, arrangements or material covered by a survey, without the prior approval in writing of the surveyor, except the direct replacement of such equipment and fittings.

PART VI - ENVIRONMENTAL DAMAGE AND LIABILITY

37. The holder of every instrument shall aim to achieve a zero net environmental footprint and shall—

- (a) adopt such measures as are appropriate;
- (b) ensure that operations thereunder are undertaken in order to minimise disturbance of and impacts to the environment;
- (c) ensure that operations are undertaken in order to avoid or minimise disturbance and impacts to critical habitats of vulnerable, endangered or critically endangered species or any species designated as legally protected; and
- (d) design facilities to minimise attraction to wildlife.

38. (1) Where in the conduct of operations under an instrument, the holder thereof detects an imminent threat of damage to the environment whether or not arising from a major environmental incident, the operator shall within no less than twenty-four hours thereof—

- (a) immediately report to the Minister and any other relevant entity and notify of all relevant details related thereto, in writing; and
- (b) take all practicable steps and preventative measures to prevent the damage.

(2) Subject to paragraph (1) and where the Minister is satisfied that an imminent threat of environmental damage exists, the Minister shall notify the holder of the instrument in writing and the notice shall —

(a) describe the threat;

Condition after survey.

Environmental damage.

Imminent threat of environmental damage.

- (b) identify the measures required to prevent the environmental damage; and
- (c) require the operator to undertake such measures as specified, or such alternative measures, within the period of time specified therein.

39. (1) The holder of an instrument that is responsible for operations that cause damage to the environment shall —

- (a) immediately report to the Minister and any other relevant entity and notify of all relevant details related thereto in writing; and
- (b) take all practicable steps to prevent the damage.

(2) Where the holder of an instrument fails to comply with paragraph (1), the holder thereof shall be liable—

- (a) to pay the costs for remediation of the damage caused as a result of such failure;
- (b) to compensate any other person who has proven beyond reasonable doubt that they have incurred expense or property damage as a direct result of the damage, (hereinafter referred to as "the claimant").

(3) Any compensation payable under paragraph (2) shall take into account —

- (a) the geographic proximity between the activities of the claimant and the environmental damage;
- (b) the degree to which the claimant is economically dependent on an affected natural resource directly impacted by the damage;
- (c) the extent to which the claimant's business forms an integral part of economic activities in the area which is directly impacted by the damage;
- (d) the scope available for the claimant to mitigate his loss and the extent to which the claimant acted promptly and responsibly to mitigate such loss; and
- (e) the effect of any concurrent causes contributing to the claimant's loss.

(4) Any claim made under this regulation shall be submitted after the holder of the instrument has reasonably contained the environmental damage within thirty days

Actual environmental damage. after the date on which notice of such containment is given to the Minister in writing.

40. Where any operations under an instrument are undertaken in, or in the vicinity of national parks and an area that has been designated by the Minister responsible for the Environment, The Bahamas National Trust or such other relevant entity, to be an environmentally sensitive area or an area subject to specific requirements —

- (a) the physical footprint of all temporary and permanent facilities, shall be minimised to reduce environmental impacts;
- (b) operations shall be undertaken so as to avoid large scale physical disturbance; and
- (c) on completion of operations, disturbed sites shall be rehabilitated to the pre-disturbed state to the best extent practicable.

41. Save and except where otherwise provided under the Act, the holder of every instrument shall respond promptly and effectively to a major environmental incident arising from the conduct of operations under an instrument, failing which the holder thereof shall be liable to pay the costs for remediation of damage caused as a result of the failure to respond to the incident.

42. (1) Where physical disturbance to the environment is unavoidable, long term or irreversible, the holder of an instrument shall employ such methods or measures of environmental remediation or enhancement, as approved by the Minister and the Minister responsible for the environment.

(2) Subject to regulation 39 and where the holder of an instrument has caused actual environmental damage, the Minister and the Minister responsible for the environment shall calculate the approximate costs to restore the affected natural resources and to procure environmental services related thereto.

(3) The holder of an instrument, responsible for environmental damage shall —

- (a) submit proposals, within such time specified by the Minister, which shall include
 - (i) the measures necessary for remediation of the damage, together with a justification;
 - (ii) the period within which the remedial measures will be undertaken;

Environmentally sensitive areas.

Environmental remediation.

Response actions.

- (iii) any additional monitoring or investigative measures to be undertaken during remediation; and
- (b) bear the full costs for the remedial measures undertaken, pursuant to this regulation.

FIRST SCHEDULE (Regulation 7)

MATTERS TO BE ADDRESSED BY AN ENVIRONMENTAL IMPACT ASSESSMENT

Every environmental impact assessment prepared in accordance with regulation 7 shall include —

- (a) a description of the proposed activity including its purpose, location, duration and intensity, and possible alternatives to the activity, including the alternative of not proceeding, and the consequences of those alternatives;
- (b) a description of the pre-activity (baseline) environmental conditions with which predicted changes are to be compared and a prediction of the future environmental conditions in the absence of the proposed activity;
- (c) a description of the methods and data used to forecast the impacts of the proposed activity;
- (d) estimation of the nature, extent, duration and intensity of the likely direct impacts of the proposed activity;
- (e) identification of unavoidable impacts of the proposed activity;
- (f) consideration of possible indirect or secondorder impacts of the proposed activity;
- (g) consideration of the short term, medium term and long term effects of the proposed activity on existing uses and values in The Bahamas' maritime jurisdiction;
- (h) consideration of irreversible and cumulative impacts of the proposed activity in the light of existing activities and other known planned activities;
- (i) identification of measures, including monitoring programmes, that could be taken to minimise or mitigate impacts of the proposed activity and to detect unforeseen impacts that could provide early warning of any adverse effects of the

activity as well as measures to deal promptly and effectively with accidents;

- (j) an identification of gaps in knowledge and uncertainties encountered in compiling the information required under this paragraph; and
- (k) a non-technical summary of the information provided under this regulation.

SECOND SCHEDULE (Regulation 11)

CONTENTS OF AN ENVIRONMENTAL MANAGEMENT PLAN

1. (1) Every environmental management plan shall include but not be limited to —

Contents Overview.

- (a) a detailed description of the activities that are to be undertaken as part of the development, particularly those activities relevant to environmental impact and risk including —
 - (i) location, general details and layout of any facility;
 - (ii) an outline of the operational details;
 - (iii) proposed timetable for the activity; and
 - (iv) any additional information relevant to consideration of environmental impacts and risks;
- (b) a detailed description of the environment that may be affected by the activity, including
 - (i) ecosystems and their constituent parts including people and communities;
 - (ii) natural and physical resources;
 - (iii) the qualities and characteristics of locations, places and areas;
 - (iv) the heritage value of places; and
 - (v) the social, economic and cultural features of the above;
- (c) an evaluation of the environmental impacts and risks shall include but not be limited to, all the environmental impacts and risks arising directly or indirectly from the planned operations of the activity and potential emergency conditions and should demonstrate that the environmental impacts and risks are reduced to as low as reasonably practicable by applying

environmental practices and technologies best suited to individual circumstances, activity and location;

- (d) appropriate environmental performance outcomes and standards against which the operator's performance in protecting the environment can be measured during the activity;
- (e) a description of the specific measures and arrangements that will be implemented for the duration of the activity to ensure that
 - (i) all of the environmental impacts and risks of the activity will be continually identified and reduced to a level that is as low as reasonably practicable;
 - (ii) control measures detailed in the environmental plan are effective in reducing the environmental impacts and risks of the activity to as low as reasonably practicable and acceptable levels;
 - (iii) environmental performance outcomes and standards set out in the environmental plan are met;
 - (iv) arrangements are in place to respond to, and monitor impacts of, oil pollution emergencies; and
 - (v) stakeholder consultation is maintained through the activity as appropriate;
- (f) a plan for ensuring how compliance with the environmental plan will be evaluated and recorded, in order to ensure that where nonconformance or potential non-conformance with the environmental plan is identified, arrangements are in place to correct these, to prevent recurrence of similar non-conformance in the future, and to provide for subsequent review of the effectiveness of actions taken;
- (g) details of consultation taken.

2. (1) Every environmental management plan shall explain how emissions of greenhouse gasses are to be managed, including —

(a) options for feasible alternatives to flaring and venting; and

Operations.

(b) the method to be used to measure the amount of gas flared or vented.

(2) Every environmental management plan shall explain how the produced water, ballast water, offshore processing drainage and any other water emanating from the well product, is to be managed, including —

- (a) an assessment of the feasible alternatives for its management and disposal;
- (b) selection of the least hazardous chemicals to minimise the toxicity of that water;
- (c) the options to be used to reduce the volume of production water discharged to the marine environment;
- (d) the method to be used to monitor the concentration of dispersed oil in production water; and
- (e) the procedure by which dispersed oil content, which exceeds the limits laid down in regulation 20, is to be recorded in the Oil Record Book or reported in accordance with that regulation.

(3) Every environmental management plan shall explain how the discharge of drill cuttings and associated drilling fluids, is to be managed, including —

- (a) an assessment of the feasible alternatives for the disposal of spent WBF and drill cuttings from well sections drilled with either WBF or NAF;
- (b) selection of the least hazardous chemicals to minimise the toxicity of the discharged fluids and cuttings.

(4) In respect of every hazardous substance to be used on the offshore installation, every environmental management plan shall also include —

- (a) particulars of the substance;
- (b) the purpose of the substance;
- (c) evidence that the selected substance has the least hazard and lowest potential environmental impact while still being effective;
- (d) the maximum volumes of the substance that can be stored on the offshore installation and the method of storage;

Fourth Schedule.

Fourth Schedule.

- (e) the maximum concentration of the substance to be used in combination with any other substance;
- (f) the maximum amounts of the substance to be used in specific periods;
- (g) a completed chemical data sheet containing as a minimum the information set out in the Fourth Schedule;
- (h) the ecotoxic nature of the substance, with reference to the Fourth Schedule; and
- (i) a detailed description of those processes and activities that present a risk of accidental discharge of the substance and a list of actions to be taken and procedures in place to reduce the risk of a spill.

THIRD SCHEDULE (Regulation 15(3))

CONTENTS OF AN OIL POLLUTION EMERGENCY PLAN

1. Every oil pollution emergency plan shall include —

- (a) details of the location of the offshore installation and of the field to which the application relates;
- (b) details of the likely reservoir characteristics including information outlining a prediction of the nature of the potential hydrocarbons (crude/gas/condensate and contaminants including maximum expected concentrations);
- (c) up to date and accurate drawings or plans showing
 - (i) the general arrangement of the offshore installation, in particular, the places and systems associated with the storage or transfer of fuels including tank capacity, filling arrangements, isolation valves and drainage systems highlighting the critical isolation points; and
 - (ii) those areas of the offshore installation identified as presenting the greatest risk of a marine oil spill;
- (d) details of the well flow characteristics; and the maximum expected shut-in wellhead pressure at the seabed;

Oil spill risk identification, assessment and prevention.

- (e) details of the proposed operations at the offshore installation;
- (f) characterisation of the oil produced, stored and used at the offshore installation including —-
 - (i) oil type;
 - (ii) viscosity;
 - (iii) density (specific gravity);
 - (iv) pour point;
 - (v) wax content;
 - (vi) asphaltene content;
 - (vii) potential spill volumes;
- (g) a detailed description of all the processes and activities which present a risk of pollution from an oil spill, with a list of specific procedures to reduce the risk of an oil spill;
- (h) in the case of well-drilling
 - (i) an assessment of potential well control failure scenarios including blowout preventer failure, rig loss, and loss of well bore integrity;
 - (ii) information on the realistic worst-case scenario in relation to the potential release of reservoir hydrocarbons including the potential daily release rate and the total quantity of hydrocarbons that could be released during the maximum time that it could take to stop the release;
- (i) an assessment of the weathering and persistence (fate) of oil if spilled on water at different temperatures and wind speeds, which shall include laboratory analysis to determine how the oil will behave once spilled and oil spill trajectory modelling;
- (j) information on the nature and effectiveness of dispersants on individual oils;
- (k) a detailed description including maps of those areas identified as at risk of environmental damage as a result of an oil spill including possible social, cultural and economic implications; and
- (1) an assessment of the potential impacts of spilled oil including identification of the environmental, social and economic resources most at risk from

PETROLEUM

oil and other hazardous materials such as sensitive receptors.

2. (1) Every oil pollution emergency plan shall include emergency response procedures for spills of oil and other hazardous substances.

(2) The emergency response procedures referred to in paragraph (1) shall include —

- (a) guidance to ensure the safety of personnel;
- (b) information to help personnel at the offshore installation deal with a spill by detailing the actions necessary to stop, minimise or mitigate the effects of a spill, including procedures for —
 - (i) determining what action to take in response to a spill;
 - (ii) preventing escalation of the spill;
 - (iii) stopping the discharge at its source, if possible;
 - (iv) identifying the safety and environmental consequences of any remedial action; and
 - (v) determining whether the spill can be contained or cleaned up using the resources available to the operator or any other person responsible for implementing the emergency response procedures;
- (c) an assessment of the preferred protection and clean up options and details of the response options available to the offshore installation;
- (d) the procedure by which spills are to be reported in accordance with regulation 30;
- (e) the procedure by which spills that the person responsible for implementing the emergency response procedures considers cannot be cleaned up or contained using the resources available to him or her, are to be reported in accordance with regulation 31;
- (f) a list of twenty-four hour contact information, including
 - (i) the operator or the operator's representative;
 - (ii) the relevant contact person within the Authority;

Emergency response procedures for spills of oil.

- (iii) any organisation contracted to respond to spills at the offshore installation;
- (iv) the person responsible for implementing the plan;
- (v) the person responsible for co-ordinating response activities;
- (vi) off-duty personnel with responsibilities for dealing with spills; and
- (vii) all other persons who have interests in the vicinity of the offshore installation that are likely to be affected by a spill from such offshore installation;
- (g) the organisational response structure for the offshore installation, including
 - (i) duties of all personnel responsible for dealing with spills; and
 - (ii) positions consistent with any incident control system that may be prescribed in the National Plan;
- (h) the notification and mobilisation procedures to mobilise the organisation detailed in paragraph (g);
- (i) the relationship with other marine pollution emergency response systems; and
- (j) an inventory of response equipment held on the offshore installation and personnel responsibilities for the deployment, survey and maintenance of that equipment.

3. (1) In the case of well-drilling, every oil pollution emergency plan shall include emergency response procedures for dealing with an uncontrolled release of hydrocarbons from a well that could be taken to prevent further release or escalation of release of hydrocarbons, including —

- (a) measures that would be taken to stop the maximum anticipated discharge of liquid hydrocarbons from the reservoir;
- (b) measures available to minimise, control or stop the continual flow of oil into the environment. Where appropriate, details of plans to implement the capping of a well, and the drilling of a relief well to re-establish primary well control of the original well, should be included to demonstrate

Well control measures.

that there is adequate planning or provision in place for these eventualities;

- (c) an estimate of the maximum duration of the release;
- (d) a description of how the response activities will be coordinated between the operator, regulatory authorities, mutual aid partners and international spill support organisations;
- (e) identifying critical equipment and services necessary to implement any identified intervention option, including —
 - (i) relief well drilling rigs;
 - (ii) intervention equipment;
 - (iii) survey equipment;
 - (iv) contractors and suppliers;
 - (v) transport facilities;
 - (vi) multipurpose service vessels;
 - (vii) other specially equipped emergency response vessels such as supply vessels and aircraft;
- (f) mobilisation plans for personnel, equipment, material and services identified as required for implementation of well control procedures.

(2) In the case of well-drilling, every oil pollution emergency plan shall provide instruction on when and how the operator will seek assistance from other stakeholders and external responders, including any dependence on the availability of contractors and suppliers and the plan shall outline the roles and responsibilities of the parties and where they fit in the emergency response structure.

FOURTH SCHEDULE

APPLICATION FOR MODIFICATION FOR USE OF HAZARDOUS SUBSTANCES

Part 1 - Introduction					
Name of licensee or lessee					
Name of operator:					
Facility activities to which this data sheet relates:					
Part 2 – Substance Information					
Chemical name:	UN Number:				
Trade name(s):	CAS Number:				
Alternative name(s):	OSPAR Classification:				
Components:					
Name and UN/CAS number of individual components:Portion by weight (%):Portion weight (%)					
Physical/Chemical Properties (may be provided in the MSDS):					
Physical state at 20°c: Boiling point range (°c): to					
Water reactivity: Melting (pour) point (°c) to					
Density at 20°c:					
Water solubility Kg/m3 at°c at pH					
Flash point (°c) pH undiluted diluted					

Does the preparation separate in seawater to give:						
floating□ sinl	floating sinking soluable materials					
Does it have surfactant properties?			Yes□	No□		
Part 3 – Substance Used and Discharge						
Proposed use:						
Drilling□	Producti	ion□	Utilities□			
Completion□	Stimulat	tion□	Other (state):			
Normal dose rate (specify units):						
Frequency of treatment:/continuously						
Probable scale of use:						
tonnes/yr						
Prepared by:						