REPSOL VETTING PROCESS & MARINE SAFETY CRITERIA FOR F(P)SOs

APPLICABLE TO FLOATING PRODUCTION STORAGE OFFLOADING UNITS (FPSO & FSO)

Reference: 90-00044PR

Applicable as of 01/04/2021

Updated: 29/03/2021

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I. Purpose and preliminary comments

It is Repsol policy to employ only F(P)SOs which have been screened for compliance with all applicable International and/or National Regulations and with other marine safety standards. The purpose of this document is to explain the process for such screening (the Vetting Assessment) and the marine safety criteria required during the process.

Compliance of F(P)SOs with the requirements described below or F(P)SOs being rated as Acceptable in the vetting process does not grant the Owner or Operator any right whatsoever to have the F(P)SO chartered or employed by Repsol, nor imposes on Repsol any duty or obligation to charter or employ the vessel.

Repsol nor any of its employees, agents or contractors, shall be under no liability whatsoever to any Owner, Operator or Third Party by reason of acceptance/non-acceptance of a particular F(P)SO.

II. Scope of Application

This procedure applies to F(P)SOs tendered for chartering or owned by Repsol.

The following is excluded from this process:

- Field compatibility
- Fitness to the nominated cargo
- Aspects related to production management, top sides and non-marine F(P)SO operations.

III.- Effective date

01st April 2021

IV. REPSOL Vetting Process

IV.1 F(P)SO UNDER REPSOL GROUP COMMERCIAL INTEREST

F(P)SOs are required to be screened on each occasion they are proposed for a new or renewal contract with Repsol Group.

A vetting assessment with an acceptable result, which includes a Repsol Physical inspection, must be obtained prior contracting.

The vetting assessment takes into account many factors which includes but is not limited to compliance with Repsol Marine Safety Criteria included in this document, latest information available from different sources such as official publications, PSC reports, casualty/incident data, previous Repsol operational performance, the fleet profile of the Technical Operator, etc... The vetting assessment may also be affected by future International or National statutory and legislative changes and/or any alteration in Repsol Group policy.

For new building units, the vetting assessment includes attendance at sea trials.

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MARINE SAFETY CRITERIA FOR F(P)SOs

During the contract, F(P)SOs are subject to a Repsol Physical inspection at an interval no exceeding 12 months.

The Repsol Physical inspection is based on the OCIMF programmes covering mainly the following aspects:

- Cargo and ballast tanks in hull, systems and operations
- Machinery space in hull, deck and hull systems and operations
- Offtake systems and operations
- Material handling systems and operations
- Mooring / positioning systems and operations
- Personnel transfer systems and operations
- Accommodation areas, general appearance and condition
- Crew and contractor management

IV.2 FOLLOW UP F(P)SO STATUS

Beyond above process, additional direct information may be gathered:

1. During a Repsol use, the F(P)SO could be subject to Physical Inspection carried out by one Repsol Vetting Inspector.

Information reviewed through steps 1 may result in the rejection of the F(P)SO (i.e. the F(P)SO being rated as Non Accepted) at any time. More generally, the status of the F(P)SO may be affected by any changes concerning safety and operational systems, change on the Repsol Vetting status of its Technical Operator, changes of name, technical operator, crew, flag etc, as well as any incident, casualty, PSC detention or Memoranda or condition of Class. Technical Operators are requested to report to Repsol Vetting any of the mentioned events whenever they occur.

IV.3 REASSESSMENT OF A F(P)SO RATED AS NON ACCEPTED

To be reassessed, if the latest available inspection is reflecting observations of any nature, the Technical Operator will be required to provide evidence that corrective actions have been taken before a physical inspection can be scheduled.

F(P)SO rejected by Repsol on two consecutive inspections will not be considered for a new assessment before three months from the last rejection, and such new assessment will require a physical inspection.

F(P)SO rejected on the ground that Technical Operator was banned by Repsol Vetting, will remain as not accepted until the Technical Operator is approved again by Repsol Vetting.

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V. REPSOL Marine Safety Criteria

V.1 Safety Case

a) Safety case, final or provisional, approved by relevant authority/state will be reviewed.

V.2. Age

Vessel Type	Age Limit (less than)
F(P)SO	50 years

a) The age of a F(P)SO is calculated from its initial delivery date. Rebuilding dates will not be taken into account.

V.3. Ballast tanks and void spaces' coating condition and substantial corrosion.

a) Ballast tanks and void spaces' coating must not be in poor condition and no areas of substantial corrosion must exist.

V.4. Casualty Reports

a) Records of casualties, incidents and investigation reports will be evaluated.

V.5. Classification Society

a) F(P)SO classed by Societies which are not full members of IACS will be rejected.

V.6. Class Recommendations

- a) Class recommendations and memoranda may result in F(P)SO rejection. Technical Operators are encouraged to close any class recommendations and memoranda before the date fixed by Class.
- b) F(P)SOs in a shipyard could be acceptable when Class reports be reviewed once F(P)SO completes/sails from shipyards

V.7. Condition Assessment Programme (CAP) and Class Society's Hull study program

- a) For vessels converted into F(P)SO, will need at least CAP 2(Good) rating for hull, machinery and cargo handling system upon the conversion and Class Society's Hull study program. In case of CAP Certificate is not available, the results of the analyzes/studies carried out by the Class Society during the last 5 years will be reviewed.
- b) For F(P)SOs no converted, the results of the analyzes/studies carried out by the Class Society during the last 5 years will be reviewed.

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V.8. Crew

Rank	Calendar time with Technical Operator	On board sea time on type of tankers (Oil; OBO; F(P)SO)
Marine Superintendent & Cargo Officer	Aggregate not less than 1 years	Aggregate not less than 6 years
Chief Engineer & 2 nd Engineer (terminology considered equivalent to 1 st . Asst. Engineer)	Aggregate not less than 1 years	Aggregate not less than 6 years

- a) Mooring Master must be certified at least as indicated by OCIMF Guidelines and before taking over approach responsabilitites, must participate in at least three lifting operations.
- b) OIM must be certified at least as indicated by OCIMF/OPITO Guidelines; or with a minimum experience of 2 years as Marine Superintendent/Cargo Officer; or with a minimum experience of 1 year as Mooring Master.
- c) For F(P)SOs with DP system:
 - a. DP Operators certified as full DP (not limited) with at least 2 years experience.
 - b. All Engineers and Electronic Technicians Onboard (ETO) have taken approved training on the DP system.
 - c. When a DP is used withing the 500 m safety zone, a bridge manning team complying with:
 - i. DP3 operation: Two DP operators on duty (Captain/OIM not included).
 - ii. DP2 operation: Two DP operators on duty
- d) For Man Ridding operations, the Crane Operator must be accredited by OPITO.
- e) Time chartered F(P)SOs whose common working language is neither English or Spanish language should fill in the Official Log Books in one of these languages, additionally to the flag requirements.

V.9. Drug & Alcohol policy

a) The Technical Operator shall certify that they have an effective Drug & Alcohol Policy in place, complying with OCIMF "Guideline for the Control of Drugs and Alcohol Onboard Ship", stipulating "zero tolerance".

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b) The Drug and Alcohol policy must include an unannounced alcohol and drug test by an external body at intervals not exceeding 12 months.

V.10. Protection and Indemnity clubs (P&I)

a) Owners guarantee that they (and/or Operators) shall maintain full entry of the chartered F(P)SO in a P&I Club which is a member of the International Group of P&I Clubs. A copy of a P&I Certificate of entry of a F(P)SO not insured with a member of the International Group of P&I Clubs will be reviewed by the Repsol Insurance Department on a case by case basis.

V.11. Technical Operator

- a) The Safety Management Systems of the Technical Operators of the F(P)SOs under the scope of the Repsol Vetting Process might be subject to assessments. A negative result in such review will cause that the F(P)SOs operated by that Technical Operator will be considered as "non accepted" until the Technical Operator has implemented all the improvements and measures in its procedures indicated by Repsol Vetting and its application has been reassessed.
- b) A safety management system which complies with ISM code requirements or an equivalent standard must be implemented on board.
- c) A Technical Operator could be rated as "non accepted" as results of its performance (Repsol vetting assessments, Repsol inspections). In that cases, its entire fleet will be deemed as Non Accepted.

V.12. Stationary keeping Systems

V.12.1 Dynamic Positioning Systems

a) To the effect of this document DP system shall be considered as minimum DP Class 2 in ahead.

1. FME(C)A

- a) The FMEA should include analysis of relevant failure modes within any component.
- b) Operational procedures shall be provided by the Technical Operator and must be available in English or Spanish language.
- c) It shall be mandatory to carry out a FMEA before the F(P)SO has been delivered and in any case at least every five years or a shorter period when it is determined by the Technical Operator management system included within the SMS or where Annual Trial results indicate that an updated is required. To the effects of this guidance, the remote trial monitoring is considered as equivalent when it's conduct by 3rd independent body. After modifications to or alteration of the F(P)SO power or propulsion, changes in the software, sensors or hardware upgrades the FMEA must be renewed.

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2. Annual Trials

- a) Annual trials to be performed by competent third-party companies or class witnesses.
- b) To the effects of this guidance, the remote trial monitoring is considered as equivalent when it's conduct by 3rd independent body.

V.12.2 Mooring Systems

a) The documents needed to assess the system used to fix the unit on the ground will be defined on case by case depending on the system involved and auxiliary liked, is any.

V.13 Personnel Transfer Systems

V.13.1 Helideck (Chopper Transfer)

a) Helidecks attached to F(P)SOs are within scope of the document Appendix VI: Aviation Ground Infrastructure Safety Requirements, Aviation Risk Management (20-00109PR)

V.13.2 Personnel Gangways & Accommodation Ladders

- a) Personnel gangways, including motion-compensated hydraulic gangways, shall be certified and subject to an inspection programme. The angles of inclination limits must be marked on its plate. Motion-compensated hydraulic gangways must be fitted with an alarm system trigged by a certain amount of movement.
- b) Accommodation ladders shall be certified and must hold the limits angles engraved on its plate as well as been adequately lit along their full length.
- c) Certificates must be kept on board with the limits for which it is designed.
- d) Likewise, the use of pilot ladders shall be prohibited for crew changes

V.13.3 Walk to Work Systems

- a) Walk to Work Systems must hold an appropriated class notation and fitted with a "traffic light" system.
- b) The Operators must be accredited by Manufacturer or by a 3rd Independent Body.
- c) They must be fitted with an alarm system trigged by a certain amount of movement. The bridges and the personnel crossing them must be closely monitored and controlled.

V.13.4 Cranes

a) Cranes used for man-riding operations must hold an appropriated class notation.

V.14. F(P)SO equipment criteria:

V.14.1 Cargo and Ballast Equipment

- a) Deck seal of the dry type shall not be accepted.
- b) A fixed monitoring system with optical and acoustic alarm for detection of flammable gases in void spaces and ballast tanks is strongly recommended to be fitted and operational. Alarm signals are to be automatically displayed in the Cargo Control Room. If a system is not fitted, procedures for daily monitoring of above mentioned spaces must be implemented, and records with gas concentration readings shall be made available for inspection.
- c) All cargo, slop and residual tanks must be fitted with high level alarms and independent (from main fixed ullage monitoring system) high-high level alarms (98%). For residual tanks, if the installation is not yet available the Technical Operator must provide an implementation plan.
- d) Cargo handling operations must be performed under closed system condition. When the fixed closed ullaging system is temporarily out of service and loading or discharging operations are carried out, this must always take place in a close condition. In this case, ullaging of each cargo space will be carried out through the vapour locks, with one UTI tape, available for every cargo tank being worked simultaneously, must be on board. The sonic hermetic tapes must be checked annually and certified. Certificates must be available on board.
- e) Cargo pumps emergency stop activation points must be provided and are to be located in the Cargo Control Room (if fitted), on the main deck at the manifold area (Port and Starboard), in the cargo pump-room at its entrance and at the lower platform and in addition on the poop deck if a stern discharge line is fitted. If installation is not yet available, the Technical Operator must provide an implementation plan.
- f) All the control equipment including but not limited to reference pressure gauge and thermometer, all other pressure gauges, vacuum gauges, thermometers as well as alarms, trips, etc. must be checked annually and results recorded.

V.14.2 Engine Room & Steering Gear Equipment

a) Engine room must be fitted with a high-level bilge alarm, with at least two (2) sensors.

V.14.3 Firefighting Equipment

a) A fixed fire detection and alarm system must be provided in the Engine Room, Cargo Pump Room, Forecastle and Accommodation area. If installation is not yet available, the Technical Operator must provide an implementation plan.

V.14.4 Pollution Prevention Equipment

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- a) A cargo pump room bilge high-level alarm, with at least two (2) sensors (dual safety), located at port and starboard side preferably, is to be fitted and fully operational.
- b) Storage and service bunker (fuel oil and gas oil) tanks must have high-level alarms.

V.15. Vessel history with Repsol

a) Repsol vetting inspections will be evaluated.

VI. Useful contact details

• Vetting issues: vetting@repsol.com

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Annex I: ABBREVIATIONS

- CAP: Condition Assessment Programme
- **DP**: Dynamic Position
- ETO: Electronic Technician Onboard
- FME(C)A: Failure Mode, Effects and (Criticality) Analysis
- FPSO: Floating Production Storage and Offloading
- FSO: Floating Storage and Offloading
- IACS: International Association of Classification Societies
- IMO: International Maritime Organization
- **ISM:** International Safety Management
- **OBO:** Oil/Bulk/Ore
- OCIMF: Oil Companies International Marine Forum
- **OIM**: Offshore Installation Manager
- **OPITO**: Offshore Petroleum Industry Training Organization (UK)
- **P&I**: Protection and Indemnity
- PSC: Port State Control
- SMS: Safety Management System
- UTI: Ullage Temperature Interface

Annex II: DEFINITIONS

For the purpose of these procedures, the following definitions apply:

- Acceptable means the F(P)SO can be used within the scope described above and is the only rating that allows such use. This rating results from a favourable assessment based on information that we have deemed positive and sufficient. The rating of the F(P)SO may be affected by any changes concerning safety and operational systems, changes of name, technical operator, crew, flag, etc., as well as any incident, casualty or terminal negative feedback report, PSC detention or Memoranda or condition of Class. (See also "Vetting Assessment")
- **CAP**, an independent and thorough scheme of inspections of the actual condition of the Hull, Machinery and Cargo Systems of a F(P)SO. It is applicable as defined in the present Rules and of the Classification Society.
- **Class or Classification Society,** a non-government organization that established and maintains standards for the construction and classification of vessels.
- **F(P)SO:** with respect to this document under this term are included floating offshore units other than Rigs or Drilling units and intended for, or that may be used for, sea or inland industry services with independence of her production capabilities including also, those that are able to receive crude from wells and process it, separating water and gas, for export or even just storage capacities.
- Incident/Casualty means all specific events that occur during the work or activity of the F(P)SO which results in:
 - o Injuries to people or damage to their health,
 - Damage to the F(P)SO and/or cargo,
 - o Damage to the environment,
 - Damage to the company's image.
 - Damage to third parties.
- **ISM Code** means the International Management Code for the Safe Operation of Ships and for Pollution Prevention as adopted by IMO.
- Lifting: under this term are named any export or transfer operation whereby the crude oil storage on cargo tanks of an Offshore Installation is pumped to an Export Tanker, such as shuttle tanker or as any other kind of tanker vessel.
- Non Accepted means F(P)SO that has been rejected as result of Vetting assessment process.
- **Observations**, non-compliance with:
 - International and/or national regulations as well as OCIMF and ICS recommendations.
 - Repsol Vetting Process & Marine Safety Criteria for F(P)SOs.

- **OCIMF**, is a voluntary association of oil Companies with an interest in the shipment and terminalling of crude oil, oil products, petrochemicals and gas with a focus on marine safety and technical matters.
- **P&I Full entry certificate**, showing cover as per the standard P & I Rules of the Club in which the F(P)SO is entered.
- **Poor coating condition**, general breakdown of coating over 20% or more and hard scale at 10% or more in areas under consideration.
- **Repsol Vetting Department,** the technical unit within Repsol responsible for establishing guidelines for safety and environmental evaluation process for each type of vessel used within the Repsol system, monitor the compliance with the rules applicable to them and managing vetting assessments and physical inspection when required.
- **Substantial corrosion** means average wastage in excess of 75% of the allowable local limit recorded in the last Class survey report.
- **Technical Operator** means an entity dealing with the responsibility for operation of the F(P)SO and which, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the ISM code and, where applicable, holds the Document of Compliance.
- Vetting Assessment means the process whereby a vessel's suitability for Repsol use is determined resulting in the status of "Acceptable" or "Non Accepted" being assigned. The field compatibility, it's fitness for nominated cargo or aspects related to production management, top sides and non-marine F(P)SO operations is not considered in this Assessment.

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