Chief Engineer

Responsibility and Authority

The Chief Engineer is responsible to the Master for all technical aspects of the ship including the efficient performance and maintenance of all deck and engine equipment and machinery on board.

For the inspection and maintenance of deck machinery Chief Engineer will coordinate with the Chief Officer and assist with repairs as required.

The Chief Engineer shall have authority over all members of the crew assigned to the Engine Department and he shall assign Engineer Officers at sea and in port to any watch or repair work that he may deem advisable for the best interest of the vessel or the safety of its cargo.

The paramount duty of the Chief Engineer is the safe, efficient and economical operation of the machinery and no other duty or consideration shall interfere with is direct and personal supervision over its operation.

Chief engineer shall always be present in Engine control room but not limited to; upon receiving one hour notice during manoeuvring in or out of port, shifting, transiting canal, navigation in narrow channel or whenever master deem necessary for safe navigation – in-case of long manoeuvring hours he should adjust watches with 2nd engineer in order to comply with MLC and Rest hours requirements.

Responsibility for Expenditures, Supervision over Engine Stores and Spare Parts

The Chief Engineer shall supervise the preparation of Engine Department requisitions, the issuance of engine stores and spare parts, regulate the use and consumption of material to assure efficiency and economy and prevent irregular practices.

The Chief Engineer shall pay particular attention to the stowage of all stores and spare parts to assure that they are securely stowed, with due regard for preservation, and plainly labelled so that any item may be located without delay. He shall assure that Visible Index for spare parts kept up to date at all times.

Inspections

The Chief Engineer shall make frequent inspections of all machinery spaces when the vessel is under way. These inspections shall be timed to verify the conditions under which all machinery is operated and the manner in which the watches are kept by each Engineer Officer

The Master shall be promptly advised of any machinery damage involving seaworthiness, possible delay or the need for outside assistance.

When the Master inspects the machinery spaces, the Chief Engineer shall accompany him.

Chief Engineer shall take a part in joining scheduled inspections of Deck Department Breach Discipline

The Chief Engineer shall make a prompt and unbiased report to the Master of any breach of discipline by any member of the Engine Department.

<u>Supervision of Ballast, Bilge, Ventilation systems and Deck</u>

Machinery

The Chief Engineer shall exercise close supervision and necessary maintenance and repairs of Ballast, Bilge, Ventilation Systems and Deck Machinery in close cooperation with Chief Officer.

He shall give such information and instruction as may be necessary to enable the Deck Department personnel including Chief officer and Bosun to operate this equipment and machinery with the maximum of safety and efficiency. He shall ensure minimum spare parts availability on board to restore operations of the Systems & Machinery at any time.

Scrubber Equipment

Overall In-charge of Scrubber operation in compliance & its maintenance.

Responsible for relevant documentation in EGCS Record Book and Other Company's MARPOL documentation to show compliance

Wash Water Ph, PAH and Turbidity sensors periodic validation with proof liquid and calibration and its record keeping in EGCS record book.

CEMS calibration and its maintenance as per maker's manual and its record keeping in EGCS record book.

Ensure EGCS PMS implementation.

To ensure sufficient Alkali ROB basis vessel trading area /pattern and raise request bunker well in advance for procuring Alkali at key ports.

To ensure compliant fuel ROB [VLSFO/ULSFO/LSMGO] in line with company's fuel policy as stated in "Fuel handling and Change over management" section 8.2.7.

To maintain critical spares ROB in accordance with company's mandatory spares list.

To prepare relevant reports for Office, Class or Flag state.

For extraction and storage of MARPOL data from Scrubber for showing compliance to any 3rd party.

Alkali bunkering, arrangement of various CIP (Cleaning in place) chemicals for WTU (Water Treatment Units).

Periodical checks on Scrubber safety alarms and trips as stated in PMS.

To report promptly to MSCSMCY on any Scrubber malfunction with corrective action planned for restoring scrubber normal operation.

To keep engine room /machinery space manned and organize Watch keeping schedule as per Fleet msg xxxx.

To hand over incoming CE EGCS running condition at sea & port in different modes [Open & Closed Loop] and region [Global & SECA].

CE to hand over to incoming CE latest port data base w.r.t. Scrubber ops as sent by GVA.

To training new joiners [Engine all staffs and Duty Deck Officer] on Scrubber operation, MARPOL requirements and Safety Trips.

W.r.t. Yara Scrubbers; CE must ensure, Leakage alarms in soot pit working on weekly basis.[special mention], To take all precautions against ME Exhaust system flooding with SW.

Bunkering Operations

The Chief Engineer is overall responsible for Bunkering operations on board, including quantity of the Fuel/Lubricating Oil delivered referring to Bunker Delivery Notes.

In case of discrepancy between the amount received, according to the vessel's calibration tables, and the amount shown on the BDN, the Chief Engineer shall present a letter of discrepancies to Master, who will issue Letter of Protest and inform the Company.

Chief Engineer shall ensure prior commencement of Bunkering that Fuel/Lubricating Oil grades delivered by supplier as per BDN is matching with ordered by the vessel.

Chief Engineer shall ensure that sufficient fuel and Lubricating Oil with safety margin, in accordance to the company's policy are on board for each intended voyage, and shall keep constant check on their quality and arrange for samples to be landed for analysis.

The Chief Engineer shall ensure that all fuel and lubricating oil tank soundings are recorded in the appropriate Log books on daily basis but not later than weekly and on arrival each port and should a discrepancy arise which in the experience of him cannot be attributed to the normal minor errors, he shall inform Master & Company immediately.

Chief Engineer is overall responsible for Safety and Pollution Prevention during Bunkering operations & Internal transfer operations of Fuel/Lubricating Oil.

Storage and Regulation of Bunker and Lubricating Oil Consumption

The Chief Engineer is responsible for the storage of bunkers and Lube oil and the regulation of their consumption. The Chief Engineer shall consult with the Master and assure himself that there are sufficient pumpable quantities of bunkers and LO on board for the anticipated voyage, and additional quantity to comply with Company's requirements of Safety margins.

Care and Upkeep of Generators and Electrical Installation

The Chief Engineer shall exercise strict supervision to assure the proper care and upkeep of the generators, wiring and all electrical installations.

The Chief Engineer shall make regular inspections of the wiring and electrical fixtures to assure that they are being properly maintained and that junction box covers, conduit covers and switch boxes throughout the vessel are properly secured with all screws or doas in place and made watertight, with proper gaskets.

The Chief Engineer shall also assure himself that lighting outlets are properly protected and vapour proof and/or explosion proof fittings and metal guards are in place where originally installed or where necessary. Electric light bulbs shall not be removed from their sockets while there is current in the circuit and the current shall

not be restored until after the vapour proof fitting (where installed) has been replaced.

The Chief Engineer shall be constantly alert to prevent the installation of unauthorized electrical equipment and portable wiring.

Galley Hot plates and other Equipment

The upkeep and repair of the galley Hotplates, ovens and other mechanical equipment in the saloon Department are the responsibility of the Chief Engineer.

He shall require that frequent inspections are made of this equipment that prompt action taken to rectify any deficiency and that the necessary spare parts are on hand.

The Chief Engineer shall render such assistance and instruction to the personnel of the Catering Department as may be necessary to enable them to operate this galley equipment safely and efficiently.

Whenever repairs are made, the Chief Engineer is responsible for ascertaining by personal inspection that everything is in working order and safe for operation before the Catering Department takes over its operations.

Absence from Ship

In the absence of the Chief Engineer, the 2nd Engineer is to remain on board and observe the Chief Engineer's standing instructions and be responsible for the care and proper working of all machineries and mechanisms.

<u>Planned Maintenance Programme</u>

The Chief Engineer is responsible for AMOS PMS software operations on board in general.

Chief Engineer is responsible for maintaining prescribed by PMS for maintenance, test, checks, overhauling of Machinery, Systems & Mechanisms on board.

Chief engineer is responsible to ensure minimum necessary spares parts are available on board and updated inventory is maintained along with Tech-27

Chief engineer shall ensure that maintenance and surveys are conducted within the framework of planned maintenance and CSM survey / or special surveys which are appropriate to the vessel.

The Chief Engineer along with Master shall promptly inform Company by e-mail, phone, all matters pertaining to any machinery damage involving seaworthiness of the vessel, possible delays, or need of shore assistance in effecting repair. Emergency or urgently needed repairs are to be similarly requested giving brief details of the job involved.

The Chief Engineer shall ensure that all alarms especially engine and fire are in good working condition and regularly tested. In case of automated engine rooms, he shall ensure that the engine control devices are in a regularly tested. In case of Automated Engine Rooms he shall ensure that the engine control devices are in a thoroughly efficient state so that the Engine Room may be safely switch to UMS operations. In the event of any of the foregoing equipment being found defective, he shall make such decision if it is necessary to resume watches in the Engine Room.

Chief Engineer shall ensure all Critical and Emergency machinery and mechanisms are in good working condition, tested as scheduled.

Standing Orders

Every Chief Engineer on joining the vessel shall issue appropriate Standing Order containing routine orders & procedures for starting and shutting down the plants, taking over the watch, keeping watch, emergency procedures in case of main engine, power or steering failure are to be prepared and prominently posted in the Engine Control room for guidance. Orders must be such that they are unambiguous and strictly enforceable. Whilst making such orders, due consideration is to be given to UMS vessels.

A copy of these orders is to be signed by every Engineer officer on board.

<u>Compliance of Statutory Regulations</u>

Chief Engineer shall ensure that the vessel's machinery operated and maintained in accordance with the Statutory Requirement and Regulations.

Deck and Cargo Machinery

Chief Engineer is responsible for maintenance and repairs of Deck and Cargo machinery including Reefer containers. He executes his responsibility for Deck and Cargo machinery with Chief Officer, 2nd Engineer and Electrical Technical Officer

<u>Classification Society and Other Inspections and Surveys</u>

The Chief Engineer shall be aware on due dates of Surveys, PSC and Flag State inspections. Chief engineer along with Master shall communicate with Technical & SQ Departments on overall readiness, preparation and rectification of known deficiencies. During inspections - personal presence & participation of Chief Engineer is obligatory

Environmental Policy

Chief Engineer is overall responsible to ensure compliance with Company's Environmental Policy and MARPOL requirements as prescribed by this Manual within Engine Department through personal verification and inspections on board. By mutual inspections and actions with Master & Chief officer achievement of Environmental & MARPOL compliance shall be achieved overall on board.

Chief Engineer is also overall responsible for record keeping within Oil Record Book, Marine Sulphur Log Book, MARPOL Seal Log as relevant documents to MARPOL & Environmental compliance.

Certificates, Documentation, Filing System

The Chief Engineer is responsible for maintaining of following:

Engine Room Log Book

Oil Record Book

Marine Sulphur Log Book

Refrigerant Log Book

Chief Engineers Night Order Book

Bunker Delivery Notes & Analyses Reports

NOx Technical Files

Pre-Arrival, Pre-Departure and UMS Check Lists

LO Analyses Reports

Critical & SOLAS Equipment inspection Records

Running hours records of Machinery & Mechanisms

Documents & Certificates for Machinery & Mechanisms in Engine Room, including MARPOL relevant Equipment.

Also, Chief Engineer is responsible for keeping updated Filing System and Company's Software as much as relevant to Engine Department.