**ENGINEERING OPERATIONAL AUDIT FORM**

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| Vessel: |  |  | Period: |  |
| Name of Auditor: |  |  | Port/ Voyage: |  |

| **Rating Matrix** | | | |
| --- | --- | --- | --- |
| **Rating No.** | **Explanation** | **Rating No.** | **Explanation** |
| **5** | Exceeds company standards and expectations | 2 | Not compliant, risk level requires remedial action |
| 4 | Compliant with company standards | 1 | Not compliant, risk level requires immediate action. Comment required with suggested remedial action. |
| 3 | Not compliant with company standards but compliant with minimum industry standards. Comment with justification/suggested area for improvement | N/A | Not Applicable |
| NS | Not Seen |  |  |

| **No.** | **Checks** | **Rating** | **Remarks / Observation** | **Reference Document** |
| --- | --- | --- | --- | --- |
| **1.** | **Pilotage Inbound** |  |  |  |
| 1.1 | Review work planning for the passage |  |  |  |
| 1.2 | Review work plan for port stay |  |  |  |
| 1.3 | Allocation of man power |  |  |  |
| 1.4 | Communication Protocol (English) |  |  |  |
| 1.5 | Pre Arrival and Arrival checks recorded in Log Book |  |  |  |
| 1.6 | Change over fuel system from HO to DO and vice versa |  |  |  |
| 1.7 | Performance of main engine during manoeuvring (ahead/ astern) |  |  |  |
| 1.8 | Preparation of cargo plant |  |  |  |
| 1.9 | Precautions when approaching berth |  |  |  |
| 1.10 | Finish with Engines/Shutting down plant. Requirements for steering gear operation |  |  |  |
| **2.0** | **Pilotage Outbound** |  |  |  |
| 2.1 | Review work achieved during port stay |  |  |  |
| 2.2 | Pre-testing arrangements (if any prior testing of gear) |  |  |  |
| 2.3 | Testing gear routines and log entries prior departure |  |  |  |
| 2.4 | Allocation of man power |  |  |  |
| 2.5 | Communication effectiveness |  |  |  |
| 2.6 | Management of plant during increase of engine load |  |  |  |
| 2.7 | Manual adjustment and automation checks |  |  |  |
| **3.0** | **Boiler Management** |  |  |  |
| 3.1 | Planning boiler management |  |  |  |
| 3.2 | Air/Fuel management |  |  |  |
| 3.3 | Communication during boiler operation |  |  |  |
| 3.4 | Firing procedures |  |  |  |
| 3.5 | Cargo and ballast pump management communications with deck department |  |  |  |
| 3.6 | Boiler smoke management |  |  |  |
| 3.7 | Management of boiler at sea, shutdown procedures |  |  |  |
| **4.0** | **Bunkering** |  |  |  |
| 4.1 | Pre-planning documentation review/safety checks |  |  |  |
| 4.2 | Effectiveness of communication |  |  |  |
| 4.3 | Delegation of responsibilities |  |  |  |
| 4.4 | Man power allocation |  |  |  |
| 4.5 | Other work schedules and operations |  |  |  |
| 4.6 | Testing of equipment prior bunkering |  |  |  |
| 4.7 | Verification of volumes |  |  |  |
| 4.8 | Sampling |  |  |  |
| 4.9 | Topping off |  |  |  |
| 4.10 | Paper work |  |  |  |
| **5.0** | **Operation & Maintenance** |  |  |  |
| 5.1 | Critical systems maintenance to verify. |  |  |  |
| 5.2 | Backwash Filter / Fine Filter operation checks, change over procedure and cleaning of elements with special attention to BOLL filter/ Kanagawa |  |  |  |
| 5.3 | Pre-work / safety precautions and checks |  |  |  |
| 5.4 | Handling spare parts attention to storing, handling, recording items used, follow up on items used with proper allocation. |  |  |  |
| 5.5 | Post maintenance commissioning and checks, process and adjustments |  |  |  |
| 5.6 | Demonstrate ability to carry out actual alarm testing / trips on machinery |  |  |  |
| 5.7 | Power management system understanding and demonstrate ability to take generator on/off load & manual load sharing. |  |  |  |
| 5.8 | Demonstrate ability to carry out the quick closing valve activation and resetting |  |  |  |
| 5.9 | Checks of Proper functioning of OWS power switch located on the Bridge. |  |  |  |
| **6.0** | **Administration** |  |  |  |
| 6.1 | Log book information |  |  |  |
| 6.2 | Oil record book completed correctly |  |  |  |
| 6.3 | PMS Job entered with accurate description & inventory control and updating |  |  |  |

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| **Auditor - Brief Summary of the overall audit and recommendation** |
| **Comments:** |
| **Observations:** |

Notes: 1. Audit is to be conducted by Auditor at least once every 12 months.

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| --- | --- | --- | --- |
| **Name of Auditor:** |  |  |  |
| **Signature:** |  |  |  |
| **Date:** |  |  |  |