**CHIEF ENGINEERS STANDING ORDERS**

**WHAT DOES A CHIEF ENGINEERS STANDING ORDER CONTAIN, HERE IS A COMMON AND MOST FREQUENTLY FOUND ONE**

**CHIEF ENGINEER STANDING ORDER**

All Engineers shall understand that the Chief Engineer is always available and that they can always request the Chief Engineer's presence whenever

they judge it necessary or appropriate.

If in doubt about any instructions or orders, the Engineers shall immediately seek clarification from the Chief Engineer.

Guidelines which as being laid out in C/E standing's Instructions to be carried out without failed.

Familiarisation:-

The following familiarisation items are required for Engineers before taking over a watch:-

1. Engine Room Familiarisation/Machinery Check List.

2. Chief Engineer's Standing Orders.

3. Engine related procedures, check lists and manuals.

4. Equipment and controls in machinery spaces.

5. Operation controls of Emergency systems.

6. Main Engine emergency controls and stops.

7. Boiler controls and emergency procedures.

8. Auxiliary Engine controls and emergency stops.

9. Fuel and Lubrication oil pump emergency stops and quick closing valve.

10. Bilge and ballast systems.

11. Fire alarms and equipment.

12. Emergency escapes routes.

13. Other emergency control systems or measures.

Other important items

Preparation and anticipation of Port State Control Inspections.

Please be reminded that The Engine Log Book to be kept clean and tidy and all entries to be neatly written.

Any mistakes or correction as when require to be made by a slim line and corrected parameter to be initiated with a small signature.

Engine room floor plates to be oil free and dry at all times/Arrange for cleaning

Safety

All tank top including purifier room to be oil free.

All traces of fuel oil stains to be cleaned off.

All containment trays with oil to be emptied. Containment trays/tins or buckets, exterior to be cleaned without traces of stained fuel oil.

Fuel oil system & pumps with oil stained to clean.

All save all to be oil free especially for Engine room bilge pumps (Reciprocation)

No empty cans should stay loose any way in engine room

All telephone boots in engine room to be well lighted up.

Oil trays on main engine entablatures to clean.

NO HOT WORK IS PERMITTED IN ENGINE ROOM.

PERMIT TO WORK AND ACTION PLAN TO BE UPDATED AND SIGHTED BY AUTHORIZED OFFICER.

ALL REST HOURS PERIOD TO BE UPDATED.

ALL WATER TIGHT DOORS - IN SHUT POSITION AT ALL TIME.

ALL FIRE DOORS - IN SHUT POSITION AT ALL TIME.

Sounding pipes of tanks shall always be properly closed.

Self closing cocks of tanks should be free to exactly that - close positively.

Oily rags and waste to be stored in metal bins which should be kept closed at all times and emptied at regular intervals for incineration.

Safety data sheets for all chemicals must be read and understood before hazardous products are used.

Follow Company safety instructions and recommendations at all times.

Prior commencement of any job, a proper and extensive Risk Assessment to be done.

If you have any doubt about something, speak to somebody or check the manuals.

Sometime a small error or problem left unattended can lead to a major problem.

Think Safety Always.

OPERATION

Engine room to be examined as per checklist.

NO alarm to be blocked and NO alarm limit to be changed without Chief Engineer's approval.

Watch keeping in the Engine Room

Watch is kept from 0800 hrs to 0800 hrs (24 hrs).

Watch keeping Engineers are 2E, 3E, and 4E.

Before taking over the watch, the Relieving Engineer shall inspect the Engine Room in accordance with the

"Engine Room Familiasation/Machinery List" and fill in the checklist Change of Duty Engineer.

Changing of watch shall take place in the Engine Room.

If an Engineer is found to be unfit for duty, the Chief Engineer shall be informed.

In order to save energy and reduce air pollution, the number of running engines shall be reduced to a minimum.

Any items found to be out of order, except as a result of ongoing repairs, shall be recorded.

Any fault or alarm conditions that can jeopardise the smooth and efficient operation or safety of the vessel shall be reported to the Chief Engineer and Second Engineer immediately.

If anything unusual is observed during watch keeping rounds, such as abnormal temperatures, vibrations, noises or smells, the Chief Engineer and Second Engineer shall be informed immediately.

Make notes on important information on the white board before handing over.

Make sure that areas around machinery and equipment are made safe. Guards and rails shall be correctly mounted.

Drip pans shall be clean and with open drain in order to be able to indicate leakage.

When pumping bilges overboard use is to be made of the Oily Water Separator and recording in the Oil Record Book.

The Engine Room must be switched to "Attended" whenever Engine Room is manned

(during the day or at night while taking rounds). This ensures that bridge personnel aware of engineer's presence in engine room.

Besides clearing all alarms before switching to "UMS", ensure that all auto-standby machinery is ready to start, all Engine Room fire doors are closed, fire detecting loops are connected.

Departure

Inform C/E on 1 hour notice. One extra Engineer will assist Duty Engineer for departure.

Examination of Engine Room as per Pre Departure Checklist, which to be completed.

Full Away on Passage

Examination of Engine Room as per Checklist.

Main engine power and parameters as per instruction.

Arrival

Inform C/E on 1 hour notice. One extra Engineer will assist Duty Engineer for arrival.

Examination of Engine Room as per Pre Arrival checklist which to be completed.

Finished With Engine

Ensure against accidental starting of main engine.

Shutting down depends on notice given by Master.

Lube oil pumps to run for at least 30 minutes before switching off if required.

PERMIT TO WORK AND CHECKLIST TO BE COMPLETED!!!!!

Emergency

In emergency situations, take appropriate action and inform the Bridge Duty Officer and the Chief Engineer and all Engineers.

The Chief Engineer shall take control of all machinery spaces during emergency situations.

Fire in Engine Room

Locate the fire. Sound the Emergency alarms, Prepare for fire fighting.

Decide on the best way to fight the fire based on all available information and knowledge of the affected area and it's surroundings.

Pay attention to the probability for explosions and spread of fire.

Pay attention to loss of stability when using water.

Engine Room Flooding

Sound the Emergency alarms.

Pump out the water using fixed pumping system. Minimise pollution whenever possible.

If necessary switch designated pump to Emergency Suction from tank top.

Reduce the effect of flooding.

Use onboard materials where possible to stem flow of water.

Oil Pollution

Stop all relevant operations.

Identify the source of the Oil Spill and establish cause.

Be aware of inflammable gasses and the risk of fire.

Start oil pollution emergency plan.

Main Engine Failure

Call Chief Engineer and inform Bridge.

Do as necessary to reduce Main Engine speed after informing CE and Bridge.

Check Main Engine systems operational.  Restart Main Engine.

Power Failure -  If  blacked out, restore electrical power. Locate fault.

Immediate actions - Locate fault. Check Prime Mover running.

Check reverse power/ preference trip reset.

Standby machinery and pumps to manual mode.

Restore switch power.  Check appropriate valves.

Restart all pumps and aux. machinery.

Restart vent fans. Restart main engine systems.

Prepare for sea going.

Inform Bridge that power is restored and ready to blow through.

Restart main engine.  Standby pumps to automatic mode.

MAINTENANCE

All maintenance as per the COMPANY SPECIFIC Maintenance Programme and Running Hours of Machinery.

Be careful when carrying out maintenance. Knowledge of the system and component is important before the removal or dismantling of any components.

For correct dismantling, inspection and assembling, the manufacturer's instructions and procedures from company should be carefully studied and followed.

Where appropriate, a Permit-to-Work must be filled in. All precautions to be taken shall be strictly followed.

Always isolate electrical equipment from its power supply and test the circuit to make sure that it is dead.

Before any lines, fittings or related items are disconnected or removed, relieve all pressure in side, steam, fuel, oil or water systems in question.

Pay special attention when removing manhole covers, always keep the minimum of four nuts on the cover, two on each opposite end of cover when breaking seal.

If a power tool should be used, check its power supply before use. Make sure safety guards are securely fixed.

When not in use or when changing accessories or guard, always disconnect the tool from its power supply.

Always keep electrical leads and pneumatic hoses clear of sharp edges and hot surfaces.

Do not work on anything that is supported only by fitting jacks or a hoist. Always use proper stands to support the item before any work is carried out.

All appliances and gear used for lifting, lowering and handling loads should be examined before use.

All safe working loads marked on appliances or gear shall be followed to the letter.

Dust masks, respirators or breathing apparatus of appropriate types shall be worn when working in dusty or toxic atmosphere or when working with paint sprays etc.

Think Safety Always!!!

BUNKERING

Following precautions are to be observed for all bunkering operations:

All the necessary transfers etc to be completed as discussed in the pre bunker meeting to ensure that sufficient space is available in the tanks.

The F.O. Overflow tank is to be empty.

Transfer pump to be isolated and switched to manual. All the bunker tank outlet valves to be shut.

Pre transfer checklist to be duly filled in.

The scuppers on deck to be firmly plugged.

The bunker hoses to be firmly supported and have sufficient play.

The bunker connection to have a proper gasket and bolts to be tightened in every hole in the flange.

The necessary fire fighting gear and sufficient absorbent pads are to be kept near the manifold.

There should be adequate means of communication between manifold, the person taking sounding, the Chief Engineer and Officer on duty.

Hand Sign to be follow and understand as per Hand Sign Poster between Barge and Shop.

Also there should be direct communication between the barge and the ship.

The bunkering to be started only after Chief Engineer verbal confirmation.

During bunkering a continuous watch to be maintained at the manifold.

Tanks being filled are to be regularly sounded at 15 minute intervals unless otherwise instructed by Chief Engineer.

The pumping rate and pressure at the manifold is not to exceed the limits directed by Chief Engineer.

The sampling of the bunker oil is to be continued throughout the bunkering.

At completion all the tanks to be sounded.

A check of H2S content to be carried out of the barge's F.O. tanks prior the start of bunkering and reported to C/E.

WASTE MANAGEMENT

THE FOLLOWING ORDERS APPLY TO THE TRANSFER, CONTROL AND STORAGE OF BILGES AND WASTE OIL:

1.   All holding and transfer operations for engine room bilge water and oily sludge will be closely monitored and controlled in accordance with instructions from the C/E.

2.   Only clean water from E.R. bilges will be discharged overboard by using the 15 ppm Oily Water Separator.

3.   Ships side overboard valve from 15 ppm OWS to remain closed and padlocked. The padlock key will be kept with the Duty Engineer or C/E.

4.   Water from E.R. bilge wells and Machinery spaces to be transferred to Bilge Tank with bilge pump.

5.   F.O. Sludge Tank and Separator Oil Tank are to be discharged ashore when full and as arranged by the C/E.

6.   All transfer of bilges and oily sludge to be fully logged down in OIL RECORD BOOK.

      All transfers will be done under the supervision of the 2/E. When transferring bilge water through the 15 ppm OWS, the ships position (latitude  & longitude) and the start time and finish time for the operation to be logged down .

7.   Daily soundings of all bilge tanks and waste oil tanks will be taken by Duty Engineer and recorded in the Sounding Book.

8.   Inform C/E immediately of any unusual or irregular soundings of the tanks in (7).

9. Inform C/E immediately if you suspect blockages or restrictions in sounding pipes, especially on sludge tanks.

10. Inform C/E immediately of any high level alarm being activated on any bilge tank or sludge tank.

11. C/E is responsible for maintaining the entries in the Oil Record Book.

12. C/E to arrange for internal inspection of 15 ppm OWS system at 3 monthly periods.

13. Advise C/E or immediately if you have any doubt or if you are unsure about anything.

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