

Safety Guidelines for Tugboats Hiring



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Safety Guidelines for Tug Boat Supply Contractor

Objective

Objective of this document is to mandate Safety requirements that shall be followed by Tugboat supply contractors and their employees while working at Pipavav Port to achieve safe work.

Scope of Work

The Tug shall primarily be used for assisting vessels in GPPL for berthing and unberthing at different berths by towing, checking & pushing within the vessel limits in APMT, Pipavav Port. Additionally, the relevant Charter Party shall be the binding agreement.

The Tug should have towing hooks forward and aft of adequate safe working load and mooring lines of sufficient strength for this purpose and also should be fitted with proper bow and stern fenders.

The Tug should also be used for assisting re-floating of grounded vessels, towing of dead vessels and assisting disabled vessels and for any other work that the vessel is capable of and as assigned by the GPPL anywhere, anytime, within the jurisdiction of the port as per requirement.

Responsibilities

Marine Department and Contractor shall be jointly responsible for the safety and security of his employee, visitors, assets and environment.

Applicability of Licenses/Permit

Contractor shall obtain all the applicable statutory licenses and permissions related to their scope of work and activity being undertaken by him.

Contractor should periodically check and verify the validity of the licenses and permission obtained from the statutory authorities.

Contractors Activities

Before commencement of work Contractor shall understand the scope of work, related hazards and established controls specified by Port and communicate to their staff by appropriate means.

Recommended Safety Standard/Procedures

Safety Training for employees of the Contractor

- All Tug Boat supply contractor should ensure that,
 - All employees undergo Port Safety Training before entering to port premises.
 - All employees are carrying valid Port Safety Pass at all times.

- Before start of any job, Contractor shall ensure to train all employees in conjunction with marine department trainings. The content of the training program may include the following:
 - Use of personnel protective equipment (PPE) in general and any special PPE specific for a job.
 - Emergency preparedness plans specific to marine operational hazard.
 - Basics on the dangerous goods handling and the complexity of the handling of container vessels and bulk liquid cargo in port areas.
 - Safety standards and procedures for carrying out the jobs.
 - Basic firefighting
 - Basic First aid
 - Use of Lifejacket

- Use of Lifebuoy ring.

Selection of Staffs

The Tugboats crew shall be manned as per the class requirements in accordance with the Merchant Shipping Act, 1958. Only Indian Nationals will be allowed to work in the Tug boats.

National certification of tug crew is set by the Maritime and Coastguard Agency as per the Port Marine Safety Code. All crew must meet these requirements and the tugs must be safely and adequately manned.

Also Tug Masters and crew must meet the local knowledge standards, this aspect should be managed by the contractor.

Staffs should only be engaged accordance following an appropriate selection process, in accordance with the Inland Vessels Act-1917.

- No person under 18 years of age should be employed in port work.
- The criteria for selection should include the following, which are essential for safe port work, especially for lashers:
 - a worker needs to be physically capable to perform the job assigned;
 - good eyesight;
 - good hearing;
 - normal reflexes;
 - the ability to comprehend and communicate in the working languages;
 - the ability to comprehend terminal signage; and
 - the ability to follow safety instructions.

Health and Medical Check-up of Manpower: -

- Contractor shall ensure that all contract employees undergo pre-employment fitness examination & produce Medical Fitness Certificate as per applicable laws and regulations.
- Contract employees should undergo periodic medical examination as per Inland Vessel's Act-1917 and applicable regulations.

Certification and Documentations

- Contractor shall maintain records for Tugboats of:
 - All the licenses and permissions from statutory bodies;
 - Inspections by authorities
 - Employee database
 - Employee health records
 - Employee working hours
 - Employee Training records
 - Incident and accident
- Tugboats shall be maintained procedural manuals for the use of the tug crew
 - IMO – SOLAS Manual
 - Company Marine Operations Manual
 - Local Tide Tables
 - Machinery operating instructions
 - Code of Safe Working practices for Merchant Seamen
 - Marine Safety Notices
 - Contingency Plan

Personal Protective Equipment: -

- Personnel on exposed decks are to wear at all times appropriate personal protective equipment (PPE's like - Safety Helmet, High Visible Jacket, Safety Shoes and Life vest), including hazardous duty (working) lifejackets, in line with the tug operator's current risk assessment.
- It is the Tug Master's responsibility to enforce the wearing and use of PPE.
- All PPE must be approved only BIS/ISI or equivalent international standard certified PPE's to employees and in date.
- The decision to put crew on the working deck to handle the towline and messenger shall rest solely with the Tug Master.
- The criterion for this task shall be whether the crew can safely carry out the required task.
- Crew members are recommended to only proceed on deck during towage operations with the following equipment.
- Contractor should provide Boiler suit or suitable alternative with reflective strips of appropriate size and high visibility to all their employees.

Port Mandatory PPE's



LIFE VEST



**SAFETY
HELMET**



**HIGH
VISIBILITY
JACKET**



**SAFETY
SHOES**

Reporting of Incidents

- Contractor shall report all cases of injury (including first aid), near miss incident and unsafe acts/condition to the contract owner/in-charge and Port HSE officer immediately after the incident.
- Contractor shall assist Port officer's in investigate all the incidents.
- Port Control Room contact, Emergency contact numbers and, Port Security control room contact number should be shared with all the workers.
- It is Contractors responsibility to report the Incident to appropriate authorities as per applicable laws and regulations.

Assessment of HSSE Performance

- Contractor shall be assessed for HSSE performance by Port Marine Department and HSSE Department.
- For the measurement of HSSE performance following key performance indicators should be considered
 - Proactive
 - Reporting of Unsafe acts/conditions.
 - Reporting of Near misses
 - Nos of Training
 - Reactive
 - Incident Statistics
 - Nos of Non-Compliance reports

Safety Committee Meetings

- The contractor should attend monthly Port Safety committee meetings at marine control building and encourage his workers for participation.

Daily Tool Box Meetings

- A Toolbox meeting is an informal safety meeting that focuses on safety topics related to the specific job, such as work force hazards and safe work practices.
- Contractor should ensure that his workers are participating in daily tool box meetings and documented.

Insurance of Tug Boats:

- During the charter period the tugs shall be kept insured by Contractors at their expenses regarding Hull and Machinery, P&I, Oil Pollution etc.
- GPPL shall not have any right to recovery or subrogation against Contractors on account of loss of or any damage to the tugs or her machinery or appurtenances covered by such Insurance or on account of payment made to discharge claims against or liabilities of the tugs.
- During the charter period the tugs shall be kept insured by the Contractor at their expense against protection and indemnity risks.
- In the event of any act or negligence on the part of the Contractor which may vitiate any claim under the insurance herein provided, the Contractor shall indemnify GPPL against all claims and demands which would otherwise have been covered by such insurance.

Safety Management System for Tugboats: -

- All operations shall be carried out in compliance with the requirements of GPPL.
- The contractor shall ensure that an adequate supply of personal protective equipment, including safety footwear, gloves, eye and ear protection, etc, is provided and that such equipment is worn.
- At all times sufficient rest hours to be prescribed to all crew members for the safe operations of Tug boats as per the ILO /statutory provisions
- Safety signs and important information shall be prominently displayed.
- Safety checks shall be carried out daily basis and record of safety checklists shall be maintained.
- The tug shall provide with a safe means of access, in compliance with the Merchant Shipping regulations.
- All tugs shall carry Emergency Response procedures, which, as a minimum cover the actions to be taken in the event of fire, explosion, grounding and collision.
- Tug crew shall be fully familiar with the use of all firefighting, lifesaving appliances and other emergency equipment's.
- All tugs shall have appropriate Permit To Work procedures, Hot work shall not be permitted when alongside at liquid jetty.
- Firefighting appliances, flammable gas and fixed fire detection and extinguishing systems must be kept in efficient working condition with records of maintenance and testing maintained.
- Flashlights, hand-portable radios and other electrical equipment used on deck shall be either intrinsically safe, gas tight or explosion proof.
- Tugs must have a documented system for monitoring working hours worked and procedures for the avoidance of fatigue.
- Accommodation spaces shall be kept clean and tidy and free from fire hazards. Fire exits shall be clearly marked.
- Lamps and other vulnerable electrical fittings should be fitted with effective covers to prevent accidental damage.
- Back-up power systems shall be maintained in good order, tested at least monthly and the results recorded.
- The tug must be fitted with an emergency steering facility, which shall be tested regularly, and the results recorded.
- The Tug should not be more than 15 years old as on the date of deployments.

Pollution Prevention

- Tugs shall carry Emergency Response procedures, which cover the actions to be taken in the event of oil spill or oil pollution.
- No oil or mixture containing oil may be discharged or allowed to escape from Tug boat whilst at the GPPL harbour.
- The engine room bilge overboard valve should be closed and locked shut whilst the in alongside GPPL harbour.
- Tugs shall ensure that scupper plugs are tightly and effectively sealed during all bunker operations.
- The following pollution control equipment shall be available and ready for immediate use:
 - Absorbent Materials
 - Non-sparking shovels, buckets, squeegees, brooms
 - Containers for recovered waste
 - Emulsifiers (for deck cleaning only)
 - Protective clothing
 - Oil Spill dispersants (OSD)

Oil Spill Response (OSR) Requirement: -

- The contractor should ensure the Tug should comprise a part of OSR combating Team and should have equipped with arms on both side for spraying the oil spill dispersant to combat the oil spillage.
- Masters of Tugs and GPPL's vessels are to ensure that their crews are fully trained in deployment of equipment and devices held on board.
- Contractor should ensure that the Regular Oil Spill Response Drills and Exercise are conducted as per statutory requirements and ensure the healthiness of equipment's.
- The Tug should have facility to store minimum requirements of TIER-1 spill response concept.
- Use of OSD can be used as per the Indian Coast Guard Circular 04/2017.
- The contract should ensure availability of OSD of above said dispersant at all times ready for use.
- Contractor to ensure compliance to requirement only the approved type of OSD should be stored at Tugs.
- The Tug should have adequate deck space for placing Skimmer with power pack and requisite hoses of approximate sizes as part of readiness to combat oil spill if any.

Emergency Preparedness and Responses

Emergency Plans: -

The purpose and scope of an emergency plan should be designed to manage and coordinate all aspects of the emergency. Emergency plans should include:

- Responsibilities of key personnel
- Circumstances and systems to activate the plan
- Outline teams and roles & responsibilities to handle various aspects of the emergency
- Additional resources such as emergency services, etc.

Communication Equipment

- Ensure No Mobile Zone around the emergency operation whilst the flammable vapour & gases leakages.
- All electrical and communications equipment must be use of Intrinsically safe approved with the EX marking, and they must be in accordance with the ATEX Directive (i.e. flameproof Troche & VHF sets etc).

Action on Tugboats in Case of Fire ashore or on at the Vessels along site

- Assist GPPL emergency team for firefighting on help of Tugboats firefighting equipment's.
- Keep coverage to vessel for immediate evacuation from berth if required or follow the instructions of Port controls.
- Keep Stand by to disconnect hoses or Marine Loading Arms at liquid jetty
- Act on the instructions from terminal representative or Port Controls

Action on Tugboats in Case of Fire on Board / alongside.

- Give the alarm by means of: Intermittent sound of long blasts on tugs whistle or rapidly and continuously ringing of tugboat's siren / bell.
- Inform Port by phone on Port Control / VHF CH & Emergency Contact-**9924333333**
- Fight fire and prevent fire spreading

Safety and Emergency Planning

- The Contractor and/or master are responsible for developing emergency plans to suit their particular
- Contractor should ensure crew are trained and practised in emergency drills. It is mandatory to develop emergency plans for the following situations:
 - Person overboard
 - Fire onboard
 - Severe weather
 - Collision and grounding
 - Personal injury / First Aid
- Further plans must be developed for other possible emergency situations that are related to the nature of onboard operations.
- Emergency Mock drills should be conducted at regular intervals as per Port instructions and regulatory guidelines

Navigation

- The tug shall be fitted with the following equipment which must be maintained in good working order: -
 - Compass
 - Facility to take compass bearings
 - RADAR with plotting facility
 - Echo sounder
 - Rudder Angle, RPM, variable pitch and bow thrust indicators (if fitted)
 - Marine VHF radiotelephone installation
 - Electronic Position Fixing Receiver
 - Mobile telephone
- Tugs with variable (controllable) pitch propellers must be fitted with an emergency stop facility on the bridge for the engine(s).
- An up-to-date record of events shall be maintained in a deck logbook or equivalent record(s).
- The tug shall receive regular Admiralty and local Notices to Mariners and operate a documented system to maintain all charts and publications up-to-date.
- The tug must be provided with the largest scale charts and publications (including a suitable nautical almanac and tide tables) appropriate to the Port.
- Tugs shall be navigated in accordance with principals laid down in Company Operations Manual, including passage planning appropriate to the area and service.
- Tugs shall be in possession of the latest available navigation warnings and weather forecasts at all times.

Towage Operations

- All towage operations must be conducted in a safe manner. If a tug master perceives an instruction to be hazardous he is to decline the order.
- Whilst engaged in towing a “clear deck” policy is to operate.
- Adequate PPE’s and lifejackets should be worn on all towage operations
- Towing equipment, which includes all ropes, wires, shackles, messengers, winches, hooks and any other item designed to provide towage services, shall be inspected prior to use and again on completion of the towage service.
- Damaged or suspect items are to be withdrawn from site.
- Emergency release systems are to be frequently tested.
- Crew is to be rested and refreshed and fit for the intended operation when the tug proceeds.
- At all times, a manned tug shall keep a listening watch on working and Harbour VHF frequencies.

- When secure, towage is to continue under the direction of pilot or Ships Master.
 - All instructions are to be confirmed, briefly via VHF.
 - All instructions are to be complied with quickly and efficiently.
- Problems or matters of concern are to be brought to the pilot's attention immediately.
- Nothing in the above is to preclude the tug master taking immediate action considered to best aid the situation should something unforeseen occur.

Safety Guidelines: - Do's and Don'ts

- **The Contractor Should Follow GPPL's Marine Department Standard Operating Procedure at all time.**
- The Contractor shall ensure that the Tug boats are in state of constant readiness and shall be ready for movement at immediate notice.
- The Tug boats shall be used as and when required and as instructed by the Control Room Officer or GPPL's authorized representative.
- The Tug boats shall be available for the Port operations on all days of the year except for the allowed maintenance period.
- The Master and Engineer shall maintain deck and engine log book respectively and the same shall be submitted to the Port control.
- The tugs should have a set of competent and qualified Master and Crew, as required by statutory regulation.
- The Contractor shall indemnify GPPL'S against all consequences or liabilities arising from the Master, Officers or Agents for their unlawful actions as well as from any irregularity in the tugs papers.
- The contractor shall participate in mitigating any emergencies like fire, sinking, stranding, Towing, Pollution viz., Oil spill Response etc as per the natural capabilities and for any act directed by GPPL's Port Control or authorized representative only.
- The Contractor shall at all times during the continuance of the contract comply fully with all existing Acts, Regulations and bye laws including all statutory amendments and enactment of State or Central Government and other local authorities.
- The Contractor shall comply with all acts, regulations and bye laws related to operation of tugs in Indian territorial waters, and shall obtain necessary clearance, as required, from D.G. Shipping, Ministry of Shipping, MMD (Mercantile Marine Department) etc. for deploying the tugs for service in the port, before the tugs are put into service
- The tugs shall during the charter period be for all-purpose at the operation of GPPL'S requirements and under their control in every respect.
- Security of the Tug boats, its appurtenances and crew will be the Contractor's responsibility.

- On the date of commencement of the contract, Tug boats shall be staunch, strong, weather and watertight and shall have completed all the necessary surveys.
- The contractor shall arrange for IRS or IACS, as third party for Survey, Inspection and trials including speed trials and Bollard Pull Test of the Tug boats.
- Trials by IRS or IACS Surveyor shall be carried out in the presence of GPPL's Representative.
- The Tug boats should be manned under (Merchant Shipping Act) Safe Manning Guidelines in force issued by DG Shipping.
- The Manning should also comply with ILO/Statutory Provisions for sufficient Work rest hours to all crew members for safe operation of Tug boats as per guidelines and the proofs (attendance sheet) for the same should be submitted along with bills every month to the Marine Services Dept.
- Contractor should follow the GPPL's guidelines of working in Pair Policy only.
- The crew posted shall be able to converse in English and local language on VHF.
- The Tug boats shall comply with all instructions from the Port Control / Harbour Master or any other Officer duly authorized by Port.
- The Contractor shall not have any direct dealing regarding scheduling of the Tug boats with any of the Steamer Agents / Ship Owners / Masters/ or their authorized representatives etc.
- The Contractor shall not indulge in any smuggling or illegal activities, give, barter or otherwise dispose of to any person or persons any arms or ammunition of any kind or permit or offer the same as aforesaid
- The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the work against the same.
- The Successful Contractor has also to carry out all operations at the maximum capacity of the Tug boats during emergency at no extra cost to GPPL'S.
- The Master and crew shall not conflict with the orders of Indian Navy or Coast Guard while on duty.
- The crew shall strictly comply with all Indian Penal/Customs/Immigration/Health Laws and the GPPL'S Regulations.
- Smoking and naked light restrictions shall be observed at all times. Open flame (including LPG) cookers are not permitted during hazardous cargo vessel shipment.

Do's and Don'ts During an Emergency

- DO NOT BE PANIC
- SHUT OFF / SWITCH OFF THE EQUIPMENTS
- RAISE THE ALARM BY HELP OF PUBLIC ADDRESS SYSTEM (PA- SYSTEM) /HAND OPERATED HOOTER OR ELECTRIC OPERATED SIREN
- EVACUATE THE AREA BY FOLLOWING ESCAPE ROUTES
- CONTACT PORT CONTROL / PORT EMERGENCY NO-9924333333)
- STAY CALM AT ASSEMBLY POINT UNTIL ALL CLEAR DECLARED

Housekeeping

- Contractor should ensure that the employees are following the Port rules for housekeeping.
 - at all times keep the area clean and tidy from rubbish, scrap, surplus materials, oil rags and unwanted tools and equipment.
 - Proper storage of equipment's should be done on designated area only.
 - Emergency escape route free from obstruction.
 - Waste generated from the work place should be disposed as per port garbage management system



COLOR CODED GARBAGE BINS