

Safe Operating Procedure (SOP) for Chipping and Painting on-board vessels in Mumbai Port Authority Jurisdiction

Purpose:

This Standard Operating Procedure (SOP) is to provide guidance to registered vendors involved in chipping and painting activities at the port area to ensure safety, environmental protection, and compliance with regulatory standards. The procedure outlines the necessary steps for performing the work safely and efficiently, while incorporating a robust monitoring mechanism to ensure compliance with safety standards.

1. Scope of Work

This SOP applies to all registered vendors performing chipping (removal of rust, corrosion, or old paint) and painting of port structures, including but not limited to ships, cranes, docks, storage tanks, and other port infrastructure.

1. Permission to be taken from port Authority in advance through agents highlighting job scope and nature prior commencement of operation. Permit to Work and Risk Assessment to be submitted while requesting Job approval. Chipping & Painting should not be undertaken unless permission received from authorised department. It should also include the registered vendor engaged for the job.
2. The Master and Operator will comply with and satisfy all port rules and regulation and MARPOL regulations.
3. The Master and Operator will only undertake Painting whilst it safe to do so during day light hours only with due consideration to weather conditions, but will not allow the same to be undertaken, without limitation, while the Vessel or any other vessel in the vicinity is: a. bunkering or transferring fuel; or b. loading fodder or grain; or c. handling dangerous, combustible or hazardous products (such as those with a low flash point).

2. Safety and Health Precautions

To ensure the safety of workers, other personnel, and the environment, the following precautions must be adhered to:

2.1 Personal Protective Equipment (PPE)

Protective Clothing: Wear coveralls and non-slip boots to protect against paint splashes, debris, and other hazardous materials.

Eye Protection: Safety goggles or face shields must be worn at all times to protect against flying debris and splashes of chemicals.

Respirators: Respirators must be worn during the chipping and painting process to protect against inhalation of dust, fumes, and vapours.

Hearing Protection: Use earmuffs or earplugs if working with loud equipment such as grinders or sanders.

Gloves: Use durable gloves (chemical-resistant for handling solvents and paints).

2.2 Tool and Equipment Safety

Ensure that all tools and equipment, including sanders, grinders, spray guns, and scaffolding, are inspected before use to ensure they are in safe working condition.

Only certified personnel should operate equipment such as sandblasters, grinders, or any machinery related to chipping or painting tasks.

Regularly maintain and clean equipment, especially paint spray guns and compressors.

2.3 Work Area Safety

Ventilation: Ensure adequate ventilation when working with paints, solvents, or any chemicals to avoid inhalation of fumes. Work in well-ventilated areas, or use local exhaust ventilation where necessary.

Signage and Barricading: Set up clear safety signs to mark hazardous areas. Use physical barriers and warning tape to prevent unauthorized entry into the work area.

Fire Safety: Keep fire extinguishers readily available. Avoid any open flames or sparks near flammable paints or solvents.

3. Environmental Protection

Waste Disposal: Ensure that all waste materials, including used solvents, paints, and abrasive materials, are disposed of according to local environmental regulations. Ensure waste containers are clearly labelled and are regularly removed to designated waste management areas.

Containment: Use tarps, containment areas, or portable barriers to prevent paint from spilling or spreading to the environment or water.

Dust Control: Use water or dust extraction equipment to minimize airborne particles during chipping, sanding, and grinding activities.

Chemical Handling: Ensure proper handling and storage of chemicals to avoid spills. MSDS (Material Safety Data Sheets) must be available for all chemicals used.

5. Monitoring Mechanism

A registered vendor has to submit a request application to Environment Management Cell for the chipping painting work with the location and requisite information as mentioned below. To ensure ongoing safety and compliance with this SOP, the following monitoring mechanisms will be implemented:

5.1 Pre-Work Inspection and Authorization

The site supervisor or designated safety officer of Vendor must inspect the work area, tools, and equipment before the commencement of any work. Work can only begin once all safety conditions are met, and a safety report is submitted to EMC for stream and also to ID office for ID.

The registered vendor while applying for the permission for chipping and painting work must submit list of equipment required to carry out the job along with the proper documents. On the of all preparation and compliances, the permission will be is issued.

5.2 Continuous Supervision

Supervisors will oversee the work on-site to ensure all safety measures and procedures are being followed.

Regular spot-checks will be conducted during the course of the work, including PPE use, proper ventilation, and correct disposal of waste materials by Supervisor or designated safety officer of Vendor.

5.3 Vendor Safety Reports

Vendors must submit daily safety reports to EMC, MbPA and ID office for vessels in ID and Bunders outlining any incidents, near-misses, or deviations from safety procedures. These reports should also document the completion of safety briefings and the condition of the work environment.

5.4 Post-Work Evaluation

Upon completion of the chipping and painting task, a post-work evaluation should be carried out by supervisor. This will include verifying the quality of the work, reviewing any safety incidents, and assessing compliance with the SOP.

Any deviations from the SOP should be documented, and corrective actions should be taken immediately. All records shall be maintained for a period of 03 months after completion of job and shall be produced to MbPA as when required.

6. Emergency Procedures

First Aid: Ensure a first-aid kit is readily available at the worksite. All workers should be trained in basic first aid.

Emergency Evacuation Plan: In the event of a major safety incident or fire, all personnel should be familiar with evacuation routes and assembly points.

Incident Reporting: All accidents or near-misses must be reported immediately to the safety officer. An investigation should be conducted to prevent recurrence.

7. Compliance and Accountability

This SOP is in alignment with port safety regulations, local health and safety laws, and environmental protection guidelines. Records of all the processes above to be maintained by the vessel and the vendor for producing as and when required.

The port authority reserves the right to conduct audits and inspections at any time to ensure compliance with safety and operational standards. All the Agents/owners of the vessel should ensure that no job is being carried out onboard the vessel by a non-registered vender.

8. Registered Vendor: This signifies that the vendor has gone through a formal registration process with the port authority involving the below processes at MEED, MbPA:

Application and Documentation: Submitting detailed application forms along with various supporting documents, such as company registration, financial statements, tax returns, trade licenses, and any other relevant documents.

Compliance with Regulations: Demonstrating adherence to port-specific rules, safety regulations, environmental guidelines, and labor laws. This is crucial for ensuring safe operations within the port environment and preventing pollution.

Expertise and Infrastructure: Proving they have the necessary expertise, skilled manpower, and appropriate equipment/infrastructure to perform chipping work safely and efficiently.

Security Deposits and Fees: Potentially paying registration fees and providing security deposits to the port authority.

9. Registration and Dock Entry / Stream Permits

The vendor shall be registered with MbPA for Dock entry Permits under Category of 'Chipping and Painting' and shall obtain Dock Entry / Stream Permits of the workers / supervisors and other personnel for the work under the agency of Vendor.

10. Rights to grant / withdraw permission

All permission are granted basis complete discretion of EMC, MbPA (In case of Port structure / infrastructure, by concerned Department). The Mumbai port Authority holds full rights to withdraw permission at any moment if above guidelines / SOP are not followed.

11. Fine / Penalty

As per provisions of Section 62 of MPA Act 2021, Vessel Agent / Vessel Owner engaging /permitting the unregistered vendor to carry out chipping and painting and the Vendor carrying out chipping and painting without registration and / or without advance permission will be liable for fine up to One Lakh rupees.

Vendor who contravenes the SOP will be liable for fine up to One Lakh rupees. Repeated contraventions will lead to blacklisting for a period of three years.

12. Exclusion

Maintenance works such as cleaning, scraping, chipping, painting and removing barnacles and other fouling organisms from the vessel's hull, including structures below the waterline (keel, rudder, propeller, thruster and sea chests), are not permitted within the port limits. Polishing, blasting and suction services on underwater structures are also prohibited.

While painting load line marks, due care to be taken to avoid Paint dripping in water. All spills, hazards, safety incidents or breaches of the terms and conditions of this Notice are to be reported immediately to Mumbai VTS on VHF channel 12.

No underwater painting, blasting, any type of chipping or hull scrapping permitted.

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