

## ANNEXURE- 1

## GUIDELINE FOR SUPPLY OF CHLORINE TONNERS

- 1. Chlorine will be supplied to OPGC in OPGC Tonners only.
- 2. Every time after receipt of OPGC empty Tonners for refilling, all Tonners are to be properly degassed. Valves are to be strictly checked for correctness of Spindle, seat & Gland etc. If minor suspect or defect found, change the whole valve or part thereof as required by the guidelines of department of explosives to ensure no failure of valve.
- 3. Fit ISI approved Chlorine valve with monel spindle & seat valve i.e either Tekno or Vanaz valves.
- Refill the Tonners those have undergone successful Hydrostatic Stretch Test (HST) & having valid due
  date of testing.
- 5. Refilled Chlorine quantity in Tonner must not exceed 900kg at any condition.
- 6. The Chlorine to be refilled must be dry & free of Sludge i.e moisture less than 150 PPM.
- 7. The supplier shall submit certificate in support of moisture content with each supply lot.
- 8. Hydrostatic Stretch Test must be done strictly as per IS 5844 guideline.
- As per Gas cylinder rule 9, every Chlorine Tonner shall be labeled with the name of the gas, name of the Filler & a Warning Tag with signature of refilling station in charge.
- 10. After refilling, each Tonner shall be verified thoroughly with Ammonia Torch for leak.
- 11. The refilled Tonners shall be kept under minimum 72 Hrs observations. The Tonners shall again be verified after observation period & Tonners verified O.K only shall be delivered.
- 12. If Tonners are kept beyond the observation period, the Tonners are to be verified again for leak before loading for delivery. No leak Tonner shall be transported.
- 13. Make sure that all fittings (valve hood, cap nut) are in proper position. Valve cap nuts shall be fitted after ensuring dryness of valve discharge section.

## GUIDELINE FOR TRANSPORTATION OF CHLORINE TONNERS

- The driver should have valid heavy vehicle driving license with endorsement on it by Road Transport
  Authority for driving HAZMAT vehicle.
- 2. Chlorine Tonners should be transported by open body truck having side-opening dala.
- 3. The driver should be able to read & write at least one Hindi and local language.
- 4. The transporter should have valid license for transporting hazardous chemical.
- 5. The vehicle should have specified hazard information on the prescribed place.
- 6. Before loading Toners, ensure no leak in Toners.
- 7. There shall be only one row of Tonner inside the Vehicle. In any case, Tonners will not be loaded one above another.
- 8. Ensure that the valves of Tonners are in a vertical plane (Top Bottom)
- 9. Do not load any other chemical or material together in the same vehicle while carrying empty and filled Chlorine Toner.
- 10. Toners shall be properly secured with rope /wooden blocks/rubber pads & should not project outside the truck frame.
- 11. The driver & staff of the vehicle should be trained & aware of chlorine hazard.
- 12. A competent person properly trained and equipped with proper PPEs like suitable SCBA/Mask, Ammonia torch & handy emergency kit must accompany to attend emergency during the transport.

- 13. The transporter should get the emergency equipments like SCBA etc checked by OPGC personner before every trip.
- 14. Attend to emergency is permitted only if the person is fully ensured with his personal safety & fully competent to attend emergency.
- 15. CO<sub>2</sub> Fire extinguisher must be made available inside the vehicle for emergency control of fire hazard.
- 16. The vehicle shall move within the safe speed limit.
- 17. The vehicle shall be parked if required in isolated place away from street or mass gathering.
- 18. The vehicle shall not be parked under direct sun especially when the atmospheric temperature is high i.e.  $> 40^{\circ}$  C. Park the vehicle under shed.
- 19. During peak summer days special care must be taken like avoiding journey in daytime so as to avoid transportation during peak temperature hours.
- 20. The following documents must be available in the vehicle: -
- Valid certificate of fitness, insurance, registration of the vehicle,
- ii. TREM CARD and MSDS,
- Contact telephone numbers of the Supplier; Consignee and the Transporter. iii,
- 21. The Transporting personnel (Driver & others) should not take any type of alcoholic drink or drug during Chlorine transport.
- 22. In case of emergency/accident, inform to nearest police station, supplier & purchaser.