CIRCULAR

In the backdrop of butadiene mobile pressure vessel accident occurred near Jaipur on 13/12/2014 due to piercing of M.S. angle in the vapour space of the rear dish end of the mobile pressure vessel resulted into leakage of Butadiene and subsequent meeting held in this office on 23/03/2015 with the approved fabricators of the pressure vessels and recognized competent persons under Static & Mobile Pressure Vessels (Unfired) Rules, 2016, it was decided that thickness of the hemispherical dish ends shall be minimum 10 mm (nominal) in the interest of safety. Since then, this office has also not approved any design drawing of mobile pressure vessels having hemispherical dish end of 8 mm (nominal) thickness. However, it has come to the notice of this office that few fabricators are still fabricating mobile pressure vessels with 8 mm (nominal) thickness of hemispherical dish ends based on the design drawings approved earlier.

In view of the above, all fabricators are advised to stop using 8 mm (nominal) thickness plate for forming dish ends based on the design drawings approved earlier. All the Inspectors recognized under rule 13(2) of Static & Mobile Pressure Vessels (Unfired) Rules, 2016 are also advised not to issue certificate for such mobile pressure vessels having 8 mm (nominal) thickness for the hemispherical dish ends.

Further, the following measures shall be complied by the approved fabricators & recognised Inspectors under Static & Mobile Pressure Vessels (Unfired) Rules, 2016 in the interest of safety:

1. All fabricators shall use couplings for fitments of nozzles procured from reputed manufacturers having relevant markings / serial nos. and test certificates. The recognised Inspectors shall ensure the quality of couplings used, as well as fitment of safety fittings during the stage-wise inspection.

2. The thread quality of the couplings shall be checked using calibrated thread gauges, plug gauges, etc. for female threads and ring gauges for male threads. Specific care on the type of threads of the couplings and their compatibility for mounting the respective safety fittings shall be taken by the fabricator. The Inspector shall clearly
make comments on these aspects in the remarks column of the Certificate of Control while issuing such certificates under rule 13(2).

3. The details of the couplings, their compliance to relevant standards, material of construction, etc. shall be incorporated in the vessel fabrication drawing while seeking approvals under Static & Mobile Pressure Vessels (Unfired) Rules, 2016.

4. The fabricators shall obtain the data from the manufacturer of safety fittings and valves about the torque to be used during fitment of safety fittings on the vessel and the torque in no case shall exceed the rated value of the particular safety fitting.

5. The fabricators shall maintain register for visits of third party Inspectors which shall clearly indicate the various stages of inspection in respect of the pressure vessel under fabrication. Entries in the register shall be counter signed by the Inspector mentioning the date of state-wise inspection.

6. Inspectors shall maintain their tour diary in respect of visits to the fabrication shops for stage-wise inspections for perusal of this office as & when required.

7. The fabricators shall install CCTV cameras in their fabrication shops covering all fabrication & quality control activities.

The receipt of this circular may please be acknowledged and compliance may please be reported.

Jt. Chief Controller of Explosives (H.O.D.)

To,

1. All PESO approved Fabricators & recognised Inspectors under Rule 13(2) of Static & Mobile Pressure Vessels (Unfired) Rules, 2016.
2. All Circle/Sub-Circle offices, DTS & FRDC.