Fatal incident at Depot construction site

Brief of Incident:

A fatal incident took place at a construction site of one of the closed depot during shot blasting for painting work of new water tank.

Analysis of Incident

During blasting operation at top stack, the Blaster Gun (nozzle) got chocked. The supervisor advised the hopper operator to release the pressure of the hopper. The hopper operator was approaching the hopper, at approx. one ft away, the top end of the hopper flew away with a sudden bang sound (shearing off the weld at the periphery) due to pressure and the hopper operator got panicked on hearing the bang sound and tried to retract by walking backwards. In the process, he slipped and fell down on the scaffolding pipes stacked at that place and got a cut behind the right ear as the helmet fell off from his head. The workman succumbed to injury in the hospital.

Lapses in the incident:

i) No safety training and suitability for the assigned job to the contractor’s workman.

ii) Use of non-standard blasting equipment (Hopper), which was not certified by competent authority for “fit for use” before use at site.

iii) Improper use of Personal Protective Equipment.

iv) Non availability of Standard Operating Procedure for a critical job like sand blasting.

Recommendations:

1. Critical equipments which are to be used shall be permitted only after verification of valid approvals, test certificates etc., as per applicable standards.

2. PPEs (Personal Protective Equipment) policy shall be strictly implemented with respect to quality of equipment as well as usage as per recommended practices.

3. Competency and experience of the personnel shall be established before engaging.
4. Functional and safety training shall be imparted to all personnel prior to assigning the job.
5. Process of refresher training shall be strengthened.
6. Standard Operating Procedures (SOPs) shall be developed for all critical activities and shall be shared with the contractors and their workmen.
7. Dos and Don’ts for a particular job shall be displayed near the workplace.
8. Work Permit system shall be implemented. Job safety analysis shall be carried out for all critical jobs and shall form part of the work permit.
9. Area earmarked for operation of pressure vessels shall be properly cordoned off and entry of personnel shall be with specific authorization.
10. Unwarranted material causing hindrance to on-going works shall be removed from the workplace.