



Fire in rear tray of shotfirer vehicle

Purpose

1. This safety alert is to bring to the attention of persons using explosives the potential hazards associated with the disposal of unused explosives and empty packaging at the conclusion of a blasting activity.

Scope

2. The information applies to all persons using explosives and in particular the destruction of unwanted or excess explosives.

Background

3. An incident has occurred after a blast where the remaining portion of non-electric lead in line has been initiated on the original product reel. The reel, including the fired product, remained on the ground for several minutes after firing and was then placed in the rear tray of a shotfirer's vehicle that was carrying Class 1.1B Detonators. The reel was placed on top of and next to empty cardboard boxes. The vehicle traveled 500m and was stopped when the driver realized there was smoke coming from the rear of the vehicle. On exiting the cab an operator observed smoke and flames from a fire in the rear tray. It was successfully extinguished using the fire extinguisher from inside the vehicle cab.

4. The incident is under further investigation and the ignition source is yet to be confirmed. A possible cause of ignition is from the heat generated when the non-electric lead line was fired on the reel. The close packing of the line on the reel would not have allowed the resultant heat from initiation to dissipate as it does when it is laid out on a shot. This latent heat may have been sufficient to ignite the empty cardboard boxes.

Issues

5. When non-electric lead in line is disposed of on the reel, heat may be generated that remains for some considerable time.

6. The elimination of possible ignition sources and risk of fire is critical to maintaining explosives safety.

7. All tasks involving explosives must be assessed to identify hazards to allow appropriate controls to be in place. These should be documented in training system competencies and standard operating procedures.

Our Vision : *Our community safe and secure from explosives*

8. Sections 7.3.1 (3) and (4) of the Australian Explosives Code specifically prohibit the transport of empty packaging and other waste on vehicles transporting explosives :
- a. “explosives shall not be transported on the same vehicle or combination road vehicle, as fire risk substances or any other materials likely to cause communicate or intensify fires”.
 - b. “explosives shall not be transported on the same vehicle as domestic, commercial or industrial refuse or waste : e.g. empty packagings, excess pallets.”
9. Explosive products are designed specifically for certain purposes. Products shall only be initiated as per the supplier’s recommendations.”

Recommendations

10. It is recommended that :
- a. the disposal of explosives is carried out in accordance with approved procedures;
 - b. empty packagings and other waste must not be transported on vehicles transporting explosives (refer AEC);
 - c. risk assessments must be carried out to identify and manage all heat sources when transporting explosives; and
 - d. shotfirer vehicles should be free of all potential ignition sources : e.g. oily rags, grass, combustible liquids, cigarettes, lighters, matches, etc.



Rear tray of vehicle and fire damaged area

Chief Inspector of Explosives