

Explosives authorisations in Queensland

The inherent sensitive nature of explosives means that it is essential to determine that an explosive is safe and suitable for service during its entire life cycle.

This is done by ensuring that an explosive's properties and characteristics are properly understood for its age, as well as the activities and circumstances that it will be subjected to, including how it responds to friction, impact, static and heat.

The *Explosives Act 1999* requires the identification of all explosives and all explosives activities, and effectively prohibits all explosives and explosives activities unless they are specifically authorised.

The Chief Inspector of Explosives declares an explosive to be authorised under the Act and, in addition, the Explosives Regulation 2003 may declare a substance or thing to be an explosive. Every authorised explosive must have an authorised name. Only

explosives authorised by the Chief Inspector can legally exist and as such are deemed to be safe and suitable in accordance with the manufacturers' datasheets and instructions.

Any explosive being imported, exported, manufactured, transported, possessed, stored or used in Queensland must be authorised under the Explosives Act.

Under the Act, the definition of an explosive is:

- a) a substance or a thing containing a substance, manufactured or used with a view to produce
 - (i) a practical effect by explosion; or
 - (ii) a pyrotechnic effect; and

- b) a substance or thing declared under a regulation to be an explosive.

This definition of explosives not only includes the main types of explosives such as blasting explosives, propellants, gunpowder, ammunition, fireworks, pyrotechnics, distress signals and power device cartridges, but also covers toy and novelty items such as sparklers, bonbons, starter pistol caps and model rocket motors.

The types of explosives used in industry and their applications are well known and understood by the public and companies. However, there are other commercial applications of explosives that are not so apparent. For example, airbags, metal forming, explosive



Brisbane's Riverfire is one of the biggest pyrotechnical displays in Queensland.



Southbank Parklands, Brisbane during Riverfire.

bolts, seatbelt actuators, safe cases for money transport and fuses in high voltage power supply.

The Explosives Inspectorate is continuously monitoring for the presence of these types of explosives articles in a world of changing technologies.

Blasting explosives include a wide range of products such as detonators, boosters, detonating cord, packaged and bulk emulsion-based explosives, ANFO (ammonium nitrate/fuel oil), ammonium nitrate, ammonium nitrate emulsions, gelignite (which is now obsolete), PETN, TNT and other dynamites.

Some 'low hazard' explosives—such as marine safety flares, sparklers, starter pistol caps, power device cartridges, safety fuses and small model rocket motors—can be purchased, possessed and used without a licence.

However, there has been a growing trend to use these unrestricted explosives outside the intended and approved use.

Unrestricted explosives have been used through manufacturing activities or modification to make home-made bombs. This is not only extremely dangerous, it is illegal under the Act. These materials are highly energetic.

Licensed people must have the right knowledge, skills, plant and equipment before any activities with explosives and energetic materials can be carried out. Over the past 12 months several young people have sustained

serious injuries, including loss of limbs, fingers, hands, feet, eyes and shocking facial injuries while playing around with explosives.

A list of every explosive authorised by the Chief Inspector is published in Explosives Information Bulletin No. 71. Information on how to proceed with a request for authorising an explosive is published in Explosives Information Bulletin No. 11. This information is available on the DEEDI website at www.dme.qld.gov.au/mines/explosives_information_bulletins.cfm ■

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