



Western Australia's Explosives Storage Facilities

What is an explosives storage facility and why do we need them?

Also known as explosives reserves, these facilities are specially designed, highly secure areas that provide safe and suitable locations for the manufacture and storage of explosives, and the storage of fireworks and ammonium nitrate.

Explosives storage facilities are important infrastructure for Western Australia and provide a significant benefit to the State's mining sector and other explosives users.

Who uses these facilities?

These facilities are used by companies of all sizes from large multinationals through to individual users of explosives.

What do these facilities look like?

Explosives storage facilities strongly resemble industrial parks, except that they are mostly empty space to allow for the mandatory separation between storage and manufacturing facilities. The magazines are required to meet stringent design criteria to ensure safety and security. They are typically container-sized steel boxes or brick buildings (usually up to 20 metres square) and surrounded by earth mounds. The magazines are connected by a road network and the whole facility is surrounded by security fencing and gates that control access.

Are these facilities dangerous?

Explosives and ammonium nitrate present a high hazard, but low risk. Modern explosives are designed to be very safe to handle during storage and transport and require specific conditions to make them explode. Similarly, ammonium nitrate is very safe to handle if kept free of contamination and away from fire. Consequently, in a properly managed facility, the chance of these substances accidentally exploding is essentially nil. Despite this, explosives are regulated in accordance with very strict, nationally consistent rules that require separation as well as hazard reduction measures. The separation required to residential developments is about one kilometre.

Why is it moving?

Perth's southern corridor has been identified as a growth area to help accommodate a rapidly expanding population, which is expected to double by 2050. With urban development and density increasing around the site area, the existing facility needs to be relocated. The relocation will enable future housing development to help meet the needs of WA's growing population, as well as help accommodate the growing needs of the mining industry.

How many of these facilities are in WA?

There are currently four explosives storage facilities in Western Australia. These are located in Baldivis, Kalgoorlie, Karratha and Port Hedland.

What is safety and security like at these facilities?

Western Australian regulations require adequate security measures for all explosives facilities, whether or not they are located in an explosives reserve.

Owing to their size and location, the Baldivis and Kalgoorlie facilities have additional security measures including security fences and patrols, CCTV monitoring and electronic access. The new facility in Myalup would also have all of these security measures. These facilities are safe, as all explosives are manufactured and stored in compliance with strict regulations, monitored by the Department of Mines and Petroleum (DMP). The buffer areas around these facilities provide an additional safeguard for surrounding areas.

Who manages these facilities?

DMP manages and closely monitors each facility.

How are the explosives and ammonium nitrate transported?

Both are transported in trucks by companies that are specially licensed to carry dangerous goods. Drivers of dangerous goods must meet strict criteria to prove they are responsible, appropriately trained and medically fit (both physically and mentally).

The vehicles are carefully labelled, so they are easily identified, and explosives or ammonium nitrate are secured in accordance with international safety standards. The transportation of explosives must adhere to the Australian Code for the Transport of Explosives by Road and Rail, while ammonium nitrate transportation must conform with the Australian Dangerous Goods Code.

Route restrictions apply for transporting explosives or ammonium nitrate within Western Australia. For example, neither are permitted to be driven through the Graham Farmer Freeway tunnel.

For more information on the route restrictions, [click here](#).

[Click here](#) for more information on the transportation of dangerous goods.



BALDIVIS EXPLOSIVES RESERVE



Main gate and gate house



Security fencing



10 tonne relocatable magazines



50 tonne magazine



Magazines showing separation and mounds



Magazines showing separation and mounds



Ammonium nitrate storage and security camera



Ammonium nitrate emulsion manufacturing site