

Project Terra FAQs

What is Project Terra?

- A 40,000t per year ammonium nitrate emulsion (ANE) plant and 15,000t ammonium nitrate (AN) storage facility located in the Oakajee Strategic Industrial Area (SIA), with a target commissioning date of Q4 2025
- Blue Diamond Australia (BDA) is the developer and owner of the facility
- BDA has engaged Platinum Blasting Services (Platinum) to operate Terra. BDA co-founded Platinum in 2014 and is its second largest shareholder

What are the key benefits to the community?

- Oakajee activation Project Terra will be the first development to be commissioned and operate in the Oakajee SIA, representing a critical milestone for both the region and for WA. Subsequently, it is expected that there will be far greater focus on, and investment in, the Midwest
- Terra will be transformative for the mining ecosystem in the Midwest and the Pilbara as it will create new local opportunities including direct and indirect employment, and will drive regional economic growth

What is BDA planning to do with AN?

- BDA will be importing AN through Geraldton once a month in 3,000 tonne cargoes to be used as feedstock to produce ANE at its facility in Oakajee
- ANE will then be distributed via road to mines in the Midwest and the Pilbara

What is AN and ANE?

- AN is a white odourless solid chemical that is used both as a fertiliser, and as a critical component in explosives for mining. It is NOT an explosive itself, and it does not burn.
- AN is shipped in one tonne bulk bags as either small crystals, granules, or as prills, which are small spheres around two to three millimetres in diameter
- The ANE process involves creating a stable mixture of AN, water, and oil, making it ideal for use in dry and wet conditions

Is AN dangerous?

 AN is classified as a dangerous good, just like petrol, and the gas in your BBQ cylinder. The reason chemicals are called dangerous goods is that they have properties that can be harmful if they are not handled, stored, or transported with appropriate care

What are the rules around the storage and handling of dangerous goods?

- The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) regulates a wide range
 of industrial activities and is responsible for processing a range of licencing, registrations, permits
 and accreditations including those associated with dangerous goods such as AN
- DEMIRS licencing imposes strict rules and requirements on organisations such as BDA and Platinum that are intended to reduce the risk of harm to people, the environment, and infrastructure



What makes AN explode?

- AN is a very stable chemical but it is an oxidizer, meaning if it is exposed to a fire, it assists combustion
- It melts at about 170°C, breaks down at 200°C, and if then exposed to a consistent temperature above 300°C for at least 45 minutes, a risk of explosion may exist even then, it's a rare occurrence. Fire prevention is key

Can an explosion like that at Beirut happen at Geraldton?

- No. In Australia the regulations and regulatory oversight around the storage of AN are very strict
- The Beirut explosion happened as a result of improper storage in contravention of almost every international convention. The AN was stored in a warehouse alongside of tyres, fireworks, and other combustibles, which would never be permitted under Australian regulatory requirements. Furthermore, the AN packaging had deteriorated to the point where the stacks of bags were collapsing and leaking material, and the fire was started by hot work welding, all of which would never be allowed under Australian regulations
- There will be no storage of AN at the Port of Geraldton

How many truck movements will you require to transport AN from Geraldton Port to Oakajee?

Two trucks an hour over a 36-hour period, once a month

Will Project Terra add a lot to traffic density through Geraldton?

- BDA's annual AN import volume will comprise less than 0.2% of the tonnage of products that currently move through Geraldton Port annually
- The subsequent truck movements required to move our AN from Geraldton to Oakajee will be a negligible addition to existing traffic and constitute less than 0.1% of current traffic movements

What route will your trucks carrying AN, take from Geraldton Port to Oakajee?

- The route that minimises exposure to buildings such as hospitals, schools, etc whilst getting our product to our facility as efficiently as possible
- The route will be John Willcock Link NW Coastal Highway

We have seen some prior AN truck incidents occurring in Australia and have concern around this

- By far, the majority of prior safety incidents for road transport of AN have occurred:
 - On long haul journeys travelling several hundred kms where the truck is well into the journey
 - Usually on rural roads at highway speeds
 - o When a brake or bearing fault results in sufficient friction and heat to cause a tyre fire
- Our required truck movements will travel a distance of less than 23km from Geraldton Port to
 Oakajee, in under 30 minutes, so the probability of a fire or safety incident is exceptionally low

What measures are you taking to minimise the chance of a fire on a truck carrying AN?

 Trucks are fitted with GPS tracking, inspected before commencing trip, fitted with a quick-fire extinguisher system, undergo wheel temperature checks prior to loading at port and entering Oakajee, and will travel on an approved and authorised route including a Geo-Fence



- Sensors and infrared cameras will be used to detect if any part of the truck temperature rises above
 80°C if this occurs, an alarm will trigger so the truck stops and the risk is averted
- Given the very short, required travel distance for the trucks, it is highly unlikely that the tyres or brake pads will heat up

What if a truck carrying AN catches fire in front of a school?

- The most important immediate action is to extinguish any fire
- The driver will follow their company's emergency response plan which will be devised with guidance from the WA Department of Fire and Emergency Services (DFES). The driver will immediately notify their operations control centre and emergency services
- Should DFES advise, an exclusion zone may be established

What is your experience in the handling and distribution of AN?

- BDA has 25 years' experience in the active supply and trading of AN into multiple ports in Australia without a single safety incident we insist on the highest safety standards
- Platinum is a well-established and respected explosives and blasting services provider, conducting safe and efficient operations across Australia, and have been operating the exact same facility as
 Project Terra over on the east coast of Australia for the past decade