

## Site Details

The Dyno Nobel Moranbah site covers an area of approximately 280 hectares, and is located approximately 4.5 km north-west of the town of Moranbah, on the western side of Goonyella Road. The site is fully fenced and equipped with a comprehensive electronic security system.

The site operates 24 hours a day, 7 days a week year-round. The plant currently has 130 employees. Majority of our operating staff live in Moranbah and, with their families, are part of the local community.

## Manufacturing Processes

Ammonium Nitrate (AN) is a safe and stable chemical used in explosives for the mining industry. The plant in Moranbah is designed to manufacture AN for use in mining. The process starts with the manufacture of ammonia from natural gas in the Ammonia Plant. This ammonia is stored as a cold liquid, with some being converted to nitric acid in the Nitric Acid Plant. The remaining ammonia is combined with nitric acid to make a liquid AN solution. This solution is either solidified in a 65m high tower to make prilled AN, or combined with fuel oil to make AN emulsion. Both prilled and emulsion AN are stored on site, before being transported by road to mine sites where they are used to make explosives.

## Dangerous Goods

Dyno Nobel manufactures and stores ammonia at the Moranbah site. Ammonia is a clear liquid or gas, with a penetrating, irritating and strong-smelling odour, much like the smell of some cleaning products. In the event of a major spill or leak, ammonia vapours may cause discomfort to people outside the facility. Symptoms of exposure can range from breathing difficulties to irritation of the eyes, causing tears to form. There are no known long term effects of exposure to lower levels of ammonia. Because of its odour, ammonia is normally detected by humans at levels well below those likely to cause harm, however, in extreme circumstances, exposure to ammonia fumes can be fatal.

Dyno Nobel also manufactures and stores Ammonium Nitrate (AN) products at Moranbah. Ammonium nitrate may be a solid (small white granules called prills), a liquid (molten AN stored at high temperatures), or combined with fuel oil to make an emulsion (a clear or gold coloured thick liquid). AN is a strong oxidiser, so may cause other items to burn. It can also react with many chemicals, and on heating can give off toxic fumes. Under certain conditions, ammonium nitrate can explode, and this is the principal risk to our neighbours from ammonium nitrate.

Natural Gas (coal seam methane) is the main raw material and fuel used at the Moranbah site, and is piped in via an underground pipeline. Natural gas is colourless, and is highly flammable. The natural gas used in the Moranbah plant has no mercaptan added, and so does not have the typical odour normally associated with natural gas.

A number of other chemicals are used/ produced in the Dyno Nobel plant, including acids (nitric and sulphuric), alkalis (caustic soda, sodium hypochlorite) and gases (nitrogen, hydrogen). While many of these chemicals are classified as Dangerous Goods, incidents involving them are unlikely to result in an impact outside of the site.

## Types of Emergencies

Dyno Nobel Moranbah is committed to operating safely, and we have comprehensive systems and procedures to ensure this. However, due to the nature of the materials we use, and the chemical processes we operate, emergency situations may occur. Dyno Nobel Moranbah has worked with local Emergency Services, neighbours and community organisations to develop plans for such situations. These plans cover the full range of potential incidents including fires, chemical spills, explosions, bomb threats and natural disasters.

In general, the effects of an emergency will be contained within the site boundaries. There are two main types of emergency that could impact on areas outside the site – a toxic gas release, and an explosion. In both these cases, Dyno Nobel Moranbah will work with local Emergency Services to minimise community impact. In extreme cases, this could involve evacuation. To ensure your safety, promptly follow all instructions from the Police or Fire Service.



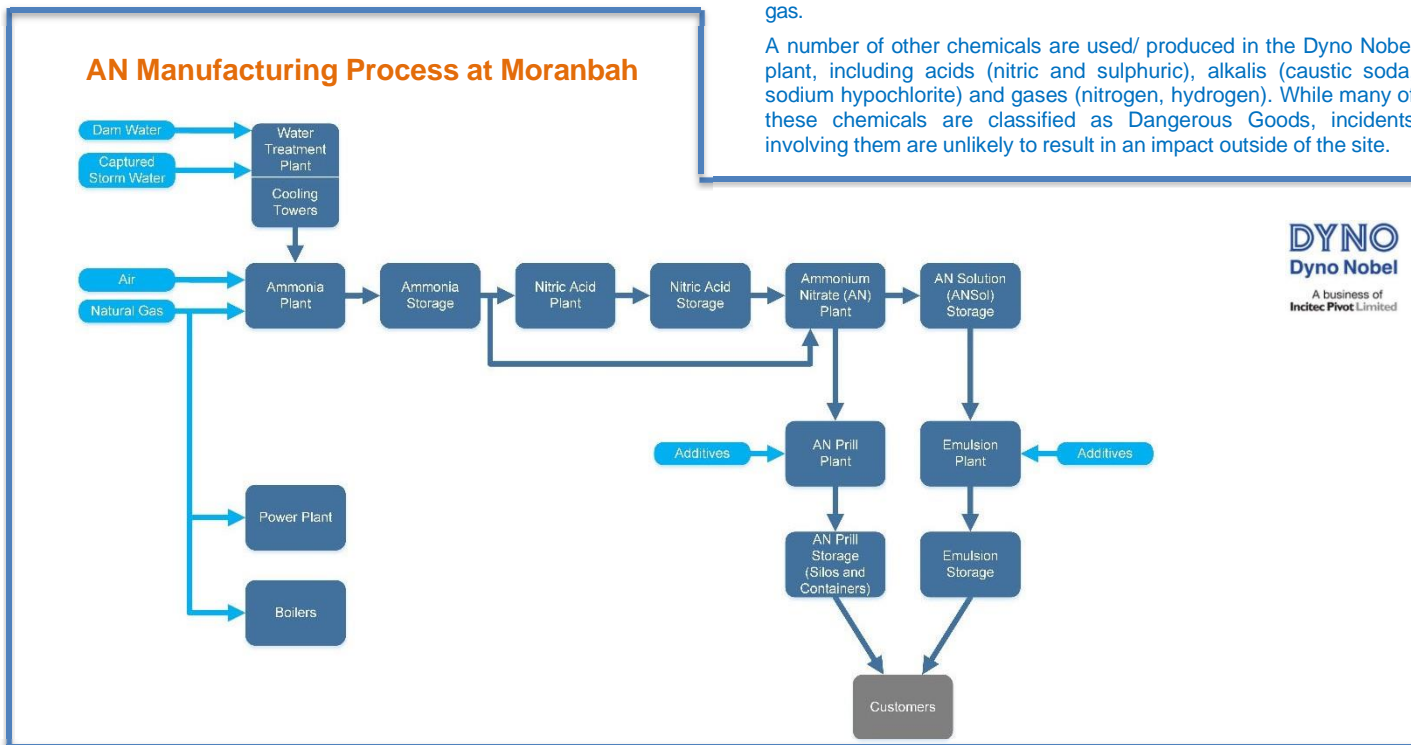
## Our Safety Framework

Dyno Nobel Moranbah operates under a strict framework of federal, state and local government safety and environmental regulations. We operate a Safety Management System (SMS), which is reviewed regularly and approved by the Queensland Government. Our SMS includes procedures, controls and training for all aspects of our operations, including start-up, shutdown, maintenance and normal operation. Robust emergency plans are also included in our SMS.

## Emergency Response

Our detailed Emergency Plans have been developed in consultation with local and state Emergency Services, and cover response to all potential incidents, including arrangements for protecting the community.

Our plant is equipped with security, fire and gas detection systems, as well as our own firefighting and emergency equipment. We have a highly trained Emergency Response Team, who conduct regular exercises with the local Emergency Services, and we test our emergency warning sirens every week.



## What to do in an Emergency

### IN AN EMERGENCY, FOLLOW INSTRUCTIONS GIVEN BY THE POLICE, FIRE SERVICE OR OTHER EMERGENCY SERVICE

#### If you are asked to Evacuate:

**GET AWAY** Evacuate promptly and safely. Emergency Services will tell you where to go to be safe.

**STAY AWAY** Respect road blocks and exclusion zones – these are in place for your safety. Do not return until advised by Emergency Services.

#### If you are asked to “Shelter in Place”

##### GO IN



Go Inside



Close Doors and Windows



Turn off Air Conditioning

##### STAY IN



Stay inside unless directed to evacuate

##### TUNE IN



Turn on the radio to local station 96.9FM to get updated information

## What to do in an Emergency

The chance of an emergency arising from Dyno Nobel Moranbah is very minimal. If there is an emergency, DNM will immediately notify Emergency Services. The Emergency Services will advise the community on what action to take, either in person, or through radio or TV broadcasts. They will work with DNM experts to define the hazardous zone, and people inside this zone may be asked to evacuate. If so, you will be advised of the direction to travel and where to assemble. Wait at the assembly point until given further instructions.

You may also be asked to ‘Shelter in Place’, by remaining indoors with doors and windows closed and air conditioning switched off. This is often the safest course of action in a gas release emergency.

In either situation, follow the directions of Emergency Services until the “All Clear” is given. This will be an announcement, either in person, or through a radio or TV broadcast.

### Community Input

Dyno Nobel Moranbah is committed to improving the local community. We support a Community Consultative Committee, operated by the Isaac Regional Council, where community members and company representatives can meet and discuss issues relating to DNM’s operations.

More information on this committee, including how to join, can be obtained through Isaac Regional Council offices, or by contacting Dyno Nobel Moranbah directly.

### More Information

Should you like more information on Dyno Nobel’s Moranbah Plant, please contact us:

Site Manager, Robert Mossop 0455 664 133  
Emergency and Community Hotline 1800 033 111

By post at:

PO Box 25  
Moranbah QLD 4744

Or on the Internet at:

[www.incitecpivot.com.au](http://www.incitecpivot.com.au)

**IN AN EMERGENCY, CONTACT POLICE,  
FIRE OR AMBULANCE BY PHONING 000**

## COMMUNITY SAFETY INFORMATION

### Advice for neighbours of Dyno Nobel’s Moranbah Ammonium Nitrate facility

This communication has been prepared by Dyno Nobel to provide information to those who live, work or own property near the company’s Ammonium Nitrate manufacturing plant at

667 Goonyella Road, Moranbah

If you require further information after reading this document, please contact us:

Emergency and Community Hotline 1800 033 111  
Site Manager, Robert Mossop 0455 664 133

### IN AN EMERGENCY CONTACT POLICE, FIRE OR AMBULANCE ON 000

Dyno Nobel is part of Incitec Pivot Limited (IPL), and has a long and proud history of safely manufacturing chemicals for agriculture, industry and mining.

Safety is at the heart of our company culture, and is symbolised by two of the key values that drive our behaviour as a company and as individuals:



Strict government regulations control the storage and handling of Dangerous Goods at our plant, and we have detailed emergency plans to manage any incident. Nevertheless, it is possible that an unplanned event on our site may create a hazard for those who live, work or own property beyond our boundaries.

We take the safety and interests of our employees and neighbours most seriously, and for this reason have prepared this information to inform the community of actions to take in the event of an emergency.

**DYNO**  
Dyno Nobel

A business of  
Incitec Pivot Limited