

**EXPLOSIVES AND DANGEROUS GOODS DIVISION**

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**EXPLOSIVES AND DANGEROUS GOODS ACT 1961-1986**

**SUMMARY OF ACCIDENT REPORTS 1986**

**EXPLOSIVES**

**FLAMMABLE LIQUIDS**

**DANGEROUS GOODS**



**DEPARTMENT OF MINES WESTERN AUSTRALIA**

## ACCIDENT REPORTS - 1986

### EXPLOSIVES

### FLAMMABLE LIQUIDS

### DANGEROUS GOODS (STORAGE)

### DANGEROUS GOODS (ROAD TRANSPORT)

During 1986, there was a notable decrease in the number of accidents involving explosives, flammable liquids and dangerous goods (storage and handling). The number of dangerous goods road transport accidents remains comparable to the 1985 statistics.

The Division's statutory involvement with dangerous goods storage accidents is still limited to explosives and flammable liquids. Divisional inspectors have continued to attend at dangerous goods storage and handling incidents involving all dangerous goods and provide technical advice to emergency services, where requested.

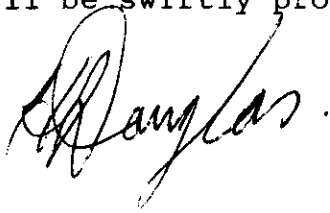
Little progress has been made in the gazettal of comprehensive regulations controlling the safe storage and use of dangerous goods (other than explosives and flammable liquids). A submission has been made to Cabinet but it is not known if and when these regulations will be promulgated.

A potentially disasterous transport incident occurred near the northwest town of Nullagine, when a road train carrying sodium cyanide and hydrochloric acid rolled over, causing several drums of cyanide to spill on the road.

The transport company concerned had neglected to segregate the two incompatible dangerous goods in accordance with the provisions of the Dangerous Goods (Road Transport) Regulations.

Fortunately, the accident occurred in an isolated area and the two chemicals did not mix as a result of the incident. Had the chemicals mixed in a similar accident within a populated area, loss of life through hydrogen cyanide poisoning would be most likely. Breaches of this nature must be avoided at all costs.

It is, nevertheless, pleasing to note that the low level of transport incidents established the previous year was maintained throughout 1986. This trend, particularly with regard to the much lower incidence of pesticide spillages, is due most likely to the increased education factor. However, now that the introductory education phase has passed, anyone who wilfully breaches the Regulations will be swiftly proceeded against.

A handwritten signature in cursive script, appearing to read "H Douglas".

H Douglas  
DIRECTOR EXPLOSIVES DIVISION

10 March 1987

## EXPLOSIVES ACCIDENTS

### Introduction

The Division was made aware of two accidents involving explosives in 1986.

These incidents could have been prevented had the people responsible for the explosives taken adequate precautions for their storage and handling.

**9 June** A 14 year old boy from Bridgetown was injured when the detonator he was playing with exploded in his hands. He received injuries to his abdomen, pelvis, thigh and the partial loss of 3 fingers.

The detonator was stolen by one of his friends from school. Other detonators were stolen and distributed to other school friends but were later recovered.

**28 November** A man received minor lacerations to his body when a plastic canister containing 26 railway track signals was accidentally dropped to the ground which resulted in the explosion of its contents.

## FLAMMABLE LIQUIDS ACCIDENTS

### Introduction

A total of 5 accidents involving flammable liquids were recorded in 1986.

The most significant incident of the year involved a man who was killed when the petrol he used to remove glue from the floor of a classroom of a suburban school caught alight. A report was presented to the Coronial Inquiry. The report issued several warnings to people who use flammable liquids for cleaning purposes.

The Canadian manufacturer of a fuel can was requested to modify a safety feature built into the can after an incident where the fuel can had burst on the rear of a vehicle. The container was not designed for high ambient temperatures as is common in Australia.

The Division assisted the emergency services in providing technical assistance, when a rail tanker carrying motor spirit overturned near the town of Highbury.

8 January            A portable metal container manufactured in Canada and widely used in Australia for carrying petrol burst whilst on the rear of a vehicle standing in the sun. The container had many safety features, one being a fusible plug which was designed to melt above a certain temperature (as encountered in a fire situation) releasing pressure build up and preventing a mass rupturing of the can. The container being of Canadian design, was not suitable for use in such high ambient temperatures common to Australia. It is presumed that the surface temperature became high enough to melt the fusible material allowing flammable vapours to escape. The problem has been brought to the attention of the manufacturer.

2 May                Several leaking 5-litre containers of flammable liquids were discovered when an ISO sea container was being unpacked at North Quay, Fremantle. Fire Brigade personnel removed these leaking containers to 2 sand filled drums, which were transported to an approved site for disposal.

18 June A fire at a Fremantle service station resulted when a customer drove away from the pump island with the nozzle still in the vehicle. The pump and nozzle were subsequently damaged and the exposed electric wiring sparked igniting spilt fuel in the vicinity of the pump. The fire was extinguished with portable fire extinguishers by service station personnel.

This incident originated when the pump attendant was required to attend to two customers at once. The second customer was engaged in the self service of fuel which distracted the employee's attention from his initial customer.

24 June A cleaner at a Balga school died from burns he received when petrol he was using to remove glue from a classroom floor caught alight. The petrol was being used in an unventilated room and a pilot light from a gas heater ignited the fumes.

The fire spread through the classroom causing extensive damage to the interior.

22 November The fast freighter rail service from Perth to Albany was derailed in Highbury when the points to the siding had been tampered with. Included in the derailed wagons was a 26,000 litre motor spirit wagon.

In the incident the motor spirit wagon was spun around and landed almost upside down jammed between a super-phosphate wagon and a general freight wagon. In this position, motor spirit slowly leaked through the top operator valve.

Throughout the clean-up operation the vapour levels were monitored. When the flow rate of the leaking fuel increased during the course of the day because of higher temperatures, cooling water was applied to the rail tank wagon. When the vapour concentration became too high, foam was applied over the spilled product to suppress the release of vapour.

With foam being applied onto the motor spirit wagon, it was safely righted with the aid of two 50 tonne mobile cranes and placed on the railway track. The remaining product was then transferred into a waiting road tanker. The area was declared safe when it was established that no flammable atmosphere was present.

## DANGEROUS GOODS (STORAGE AND HANDLING)

### Introduction

Three of the five accidents reported in 1986 occurred in the home environment.

The two incidents involving LP Gas could have been prevented had the gas appliances not been left unattended.

The fire in a garage at a suburban home highlighted the need for pool chlorinating chemicals to be stored away from fuels, solvents and oils, as improper storage of such goods can lead to disastrous consequences.

An engineering firm was advised to segregate two non-compatible dangerous goods in their store following an incident where a toxic gas was produced following the accidental mixing of the two chemicals.

Most of the accidents reported in this section are still beyond the legal responsibility of the Division to investigate. However, inspectors have continued to assist in such investigations due to their chemical knowledge and expertise in dangerous goods safety requirements.

13 March            An employee at an engineering firm was preparing a cleaning bath for some metal plates when he accidentally poured a sodium hypochlorite solution into a mixture of hydrofluoric and sulphuric acids.

The resulting reaction immediately released chlorine gas which affected a number of employees at the factory. At that stage, an employee realising what had occurred, started decanting the hypochlorite and acid mixture back into five 25-litre plastic containers. During the decanting process, some of the acid mixture was spilt on to the ground.

The spilt acid was neutralised with lime, and the remainder was taken to a nearby lime pit for neutralisation.

Some 20 employees were taken to hospital for observation.



1 April

A 4.5 kg LPG cylinder was involved in a fire which caused extensive damage to the rear section of a suburban home.

The occupants of the house were heating a pan of vegetable oil on a portable gas burner connected to the cylinder when the oil caught alight and splashed onto the rubber hose supplying the gas. The burning oil melted the hose and the escaping gas was ignited.

The fire brigade isolated the cylinder by rolling it on to the back lawn where it was allowed to burn until the contents were exhausted.

Investigations conducted by the Police and an SEC gas inspector revealed that the cause of the fire could not be attributed to faulty equipment. The burner was unattended at the time of the incident; if it had been attended the fire would probably have been avoided.

18 June

A damaged 5 litre package containing acetic acid of unknown concentration was found on the roadside by a concerned resident. Fire Brigade officers disposed of the spilled product by dilution with copious amounts of water.

16 July

A minor explosion occurred in a household garage when petrol came in contact with pool chlorine. It was not known how the two chemicals came in contact, although both substances were standing alongside each other just prior to the accident.

Two explosions occurred during the fire. The first was probably due to the mixing of the two chemicals and the second, ignition of petrol.

Fortunately, only small quantities of the chemicals were involved. The Fire Brigade promptly arrived on the scene extinguishing the flames before any damage was caused to the garage.

19 August

An explosion occurred within a dwelling when an LPG portable cooker was placed on the burner of a gas stove in an attempt to boil a kettle. Apparently, the gas stove was inadvertently lit instead of the portable cooker resulting in the cooker's LPG cylinder overheating and releasing gas from its pressure relief valve.

Fortunately the occupant retired to the rear of the premises immediately after lighting the stove and damage was limited to the stove and kitchen fittings.

## DANGEROUS GOODS (TRANSPORT ACCIDENTS)

### Introduction

In 1986, 22 road transport accidents involving dangerous goods were recorded by this Division.

The most significant accident of the year was the overturn of a road train carrying sodium cyanide and hydrochloric acid at Nullagine. The transport operator neglected to segregate the two incompatible chemicals in accordance with the Dangerous Goods (Road Transport) Regulations 1983. This incident could have created an extremely hazardous situation had the two chemicals mixed in the roll-over, producing the deadly hydrogen cyanide gas.

Since this incident, this Division has arranged through the WA Chamber of Mines, the setting up of a mutual aid group involving mining companies with expertise in the use and handling of cyanide. The mutual aid group is intended to enable the efficient response to incidents involving cyanide by drawing on the technical expertise from the nearest available source - usually a mine using cyanide in its processing operation.

Following an amendment of the Regulations in 1985, requiring operators to provide greater security to packages on vehicles, it was pleasing to note that there has been a reduction in the number of recorded accidents involving pesticides, from 7 in 1985 to 1 in 1986.

Another incident (involving self loading of kerosene in bulk vehicle tanks) has prompted this Division to restrict the use of kerosene storage tanks within fuel depots unless the tanks are connected to an approved tank filling stand.

The 24 hour dangerous goods transport emergency contact number, provided by a number of companies, was tested and found to be satisfactory.

DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 1/86

Accident Details:

Date: 3 January 1986  
Location: Great Eastern Highway, Northam

Dangerous Goods Chlorine  
Involved: Class 2.3 Subsidiary Risk 5.1  
UN No. 1017

Scenario:

On Friday, 3 January at approximately 0730 hrs a prime mover/semitrailer loaded with eleven 920 kg tanks and sixty-nine 68 kg cylinders of chlorine was stopped on Great Eastern Highway west of Northam and outside of town. The driver heard a noise and saw a leak of chlorine from one of the tanks. He attempted to stop the leak while wearing a canister respirator but was overcome by the gas. Police and Fire Brigade personnel arrived and the leak was stopped at 0830 hrs.

The vehicle was subsequently driven away.

## DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 2/86

### Accident Details:

**Date:** 18 February 1986

**Location:** Approximately 30 km south of Leonora, on the Kalgoorlie - Leonora Highway

**Dangerous Goods Involved:** Hydrochloric Acid  
Class 8, UN No. 1789  
Packaging Group II

### Scenario:

On Tuesday, 18 February at approximately 0200 hours, a rigid vehicle - dog trailer combination was travelling north along the Kalgoorlie - Leonora Highway when the truck driver was blinded by the headlights of an oncoming car.

The driver moved to the left hand side of the road, which caused the trailer to start sliding down the embankment. The trailer rolled over and broke away from the truck.

Six 200 litre drums of hydrochloric acid were ruptured as a result of the accident. As the spillage occurred in an isolated area, it posed no danger to property or members of the public.

Neutralisation of the spilt acid was achieved, when the spillage on the road was washed down with copious amounts of water onto the soil, which is naturally alkaline.

DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 3/86

**Accident Details:**

**Date:** 12 February 1986

**Location:** Approximately 54 km north of Nanutarra on the North West Coastal Highway.

**Dangerous Goods Involved:** Diesel Fuel, Class 3.3 Flammable Liquid, exempt for the purposes of Road Transport [Reg. 104(b)].

**Scenario:**

On Wednesday, 12 February at approximately 2300 hrs a prime mover towing a tanker trailer became detached from the trailer whilst negotiating a crest. The tanker trailer shunted forward and the bolts securing the turntable to the prime mover sheared causing the vehicle off the road and the trailer to break free and roll down an embankment. Diesel spillage occurred from a rupture in the tank shell and vents on top of the tank.

The remainder of the load was transferred to another tanker and despatched under police supervision. Due to the remoteness of the incident the spilled product did not present any danger to the public.

**DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 4/86**

**Accident Details:**

**Date:** 17 March 1986

**Location:** Norseman Road  
10 km South of Coolgardie

**Dangerous Goods Involved:** Methyl Ethyl Ketone Peroxide  
Class 5.2 UN No. 2550  
Packaging Group I

**Scenario:**

At about midnight, 17 March the turntable on a semi-trailer cracked causing the trailer to roll over near Coolgardie. A consignment of MEKP (4400 kg in 5 kg containers) leaked causing a fire resulting in the complete destruction of the trailer and load.

The incident resulted in no injuries and all remnants were recovered and returned to the prime contractor or buried at the site as advised by the local authority. All dangerous goods were consumed during the incident.

## DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 5/86

### Accident Details:

**Date:** 18 April 1986

**Location:** Garratt Road and Stone Street  
Bayswater

**Dangerous Goods Involved:** Pearl Caustic Soda  
Class 8 UN No. 1823  
Packaging Group II

### Scenario:

At approximately 1700 hrs on 18 April, a semitrailer loaded with 25 kilogram drums of Pearl Caustic Soda braked sharply in heavy traffic. Several pallets of the goods were dislodged from the load and fell forward on to the prime-mover cab and the roadway.

An unknown amount of caustic soda escaped from several damaged pails.

The load was adjusted by the driver of the vehicle and the vehicle left the scene of the accident. Spilt caustic soda was left on the roadway.

Police and Fire Brigade attended and cleaned the spillage. Traffic was disrupted during the clean-up as the exact nature of the goods was not known.



DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 6/86

**Accident Details:**

**Date:** 3 June 1986

**Location:** 94 km south of Exmouth  
on the Exmouth-Minilya Road

**Dangerous Goods Involved:** Aviation Gasoline  
Class 3.1 UN No. 1270  
Packaging Group II

**Scenario:**

At 2230 hrs on 3 June a triple road train, fully loaded with aviation gasoline, was travelling north at 80 kph and was forced to move left off the narrow bitumen road to pass an oncoming double road train. As the rear trailer returned to the bitumen it whipped up hitting the rough raised edge of the road and overturned. The tank split losing its entire load of 32 000 litres.

A fire resulted in about 100 square metres of scrub which was extinguished by the driver with the assistance of the driver of the other road train.

## DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 7/86

### Accident Details:

**Date:** 17 June 1986

**Location:** Cnr Admiral and Clifton Streets  
Albany

**Dangerous Goods  
Involved:** LP Gas  
Class 2.1 UN No. 1075

### Scenario:

At approximately 1030 hrs on 17 June 4 x 45 kg cylinders of LP Gas fell from the rear of a tray top vehicle as it was turning right from Admiral Street into Clifton Street. One of the cylinders suffered valve damage and a leakage of product occurred.

A passing police patrolman called the local Fire Brigade who removed the leaking container to a clear area and supervised the discharge of the remaining product.

The incident did not produce any personal injury or major damage. The probable cause of the incident was the failure of the driver to properly secure the gates of the vehicle.

DANGEROUS GOODS TRANSPORT ACCIDENT REPORT 8/86

Accident Details:

Date: 25 March 1986

Location: Cannington

Dangerous Goods Involved: Methyl Ethyl Ketone Peroxide (MEKP)  
Class 5.2  
UN No. 2550, 2563  
Packaging Group I

Scenario:

On Tuesday, 25 March a 5 kg package containing 40% Methyl Ethyl Ketone Peroxide was found on a roadside at Cannington. The package was handed into the local police station by a member of the public who located it.

No details were available of the vehicle and/or transport company that carried the package.

The MEKP package was subsequently transported to an approved tip for disposal.

## DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 9/86

### Accident Details:

Date: 11 August 1986

Location: Queen & High Streets, Fremantle

Dangerous Goods Involved: Chlorine (in Cylinders)  
Class 2.3, Sub-Risk 5.1  
UN No. 1017

### SCENARIO

On Monday, 11 August the driver of a semi-trailer vehicle was not given clear instructions of the route from Kewdale to North Fremantle and the vehicle entered the Fremantle Central Business District. When turning from High Street at 0920 hrs in the city centre the rear wheels went up over a median ridge, one of the restraining ropes was cut on a traffic sign and load stability was lost. Ten of the 54 cylinders slipped under the midlevel chain and fell to the road-way.

The driver promptly alerted the emergency services who attended and rectified the problem. After initial checking, the driver was escorted by an Inspector of Dangerous Goods to his correct destination.

There was no leakage of gas.

**DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 10/86**

**Accident Details:**

**Date:** 25 August 1986

**Location:** Vulcan Road, Canning Vale

**Dangerous Goods Involved:** 4,4' Diamino diphenyl methane  
(Methylene Dianiline - MDA)  
Class 6.1(b) UN No. 2651  
Packaging Group III  
(Carcinogen)

**Scenario:**

At 1430 hrs, Monday 25 August a small quantity (approximately 1 litre) of MDA from a 205 litre drum was reported spilled on company premises at Vulcan Road, Canning Vale.

The leaking drum was part of a consignment of MDA that had just been delivered to the premises. Mishandling of the original sea container was assumed to have caused the damage to the drum.

The situation was rendered safe at 1617 hrs when the Fire Brigade personnel wearing self-contained breathing apparatus isolated the leak and banded the area surrounding the leaking drum with sand.

Disposal of the MDA (from the leaking drum) and contaminated sand was conducted by high temperature incineration.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 11/86

**Accident Details:**

**Date:** 4 September 1986

**Location:** Great Eastern Highway  
Kalgoorlie Turnoff from Coolgardie

**Dangerous Goods Involved:** Sodium Cyanide  
Class 6.1 UN No. 1689  
Packaging Group I

**Scenario:**

On Thursday, 4 September at approximately 0700 hrs a semi-trailer carrying 23 drums of sodium cyanide lost part of its load whilst negotiating the abovementioned bend. Seven of the drums dislodged from the truck burst on hitting the ground and spilt a portion of their contents on the road and verge.

Police and Fire Brigade personnel were notified, road blocks and detours established, whilst operators from a nearby mine proceeded with recovery of the product which was placed in empty cyanide drums and re-sealed.

Neutralisation of the small amount of residual crushed pellets was carried out by Fire Brigade personnel using dilute sodium hypochlorite solution. Finally, the entire affected area was covered with a layer of soil as an extra precautionary measure.

The re-sealed drums and remainder of the load were re-arranged and secured to the correct standard and the vehicle was allowed to proceed to its destination.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 12/86

**Accident Details:**

**Date:** 12 August 1986

**Location:** Wittenoom - Roebourne Road,  
49 km north of Wittenoom

**Dangerous Goods Involved:** Petroleum Fuel  
Class 3 UN No. 1270  
Packaging Group II

**Scenario:**

On Tuesday, 12 August at approximately 1300 hrs, a prime mover/semi-trailer vehicle combination travelling along the Wittenoom - Roebourne Road overturned when the driver swerved to avoid a number of kangaroos on the road.

One of the three bulk containers on board the semi-trailer was extensively damaged. Fortunately, the tanks were empty at the time of the incident and no product spillage occurred.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 13/86

**Accident Details:**

**Date:** 19 September 1986

**Location:** Service Station, Sirling Highway  
Nedlands

**Dangerous Goods  
Involved:** Motor Spirit  
Class 3.1 UN No. 1203  
Packaging Group II

**Senario:**

On Friday, 19 September at 1215 hrs, the driver of a tanker vehicle commenced to fill an additional inter-connected tank located on the premises after filling a below ground super petrol tank. The first tank had not been capped when product from the tank being filled siphoned into the first tank, overflowing it and causing product to run over the concourse.

Approximately 300 litres of fuel was spilt. Police officers controlled access and traffic flow while Fire Brigade personnel attended to the spill and subsequent clean up.



DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 14/86

Accident Details:

Date: 15 October 1986

Location: Lucius Road, Hamilton Hill

Dangerous Goods Involved: Corrosive Liquids N.O.S.  
(9% Hydrochloric Acid)  
Class 8 UN No. 1760  
Packaging Group II

Scenario:

Direct information is not available as the package loss was not witnessed or noted by the vehicle driver.

On Wednesday, 15 October at approximately 1245 hrs a member of the public noticed the 25 litre container on the side of the road and the loss of a small amount of the contents. The person alerted the Fire Brigade of the spillage through the '000' emergency contact number which was marked on the label. The very small spillage of 9% hydrochloric acid was subsequently cleaned up by the Fire Brigade.

The transport company, when located, advised that the slim package was able to "slip through" the gap between the vehicle side gates.

## DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 15/86

### Accident Details:

**Date:** 1 November 1986

**Location:** Hampton Road, South Fremantle, between Clontarf Road and Healy Road

**Dangerous Goods Involved:** "Solvesso 150", (Flash Point 66°C)  
Petroleum Distillate NOS  
Class 3.3, ID No. WA 1030

### Scenario:

On Saturday, 1 November at approximately 2030 hrs. a semi-trailer fitted with an ISO tanker (containing "Solvesso 150") overturned after negotiating a right hand bend.

The tank container had separated from the semi-trailer due to the failure of the twist locks, which were used to secure the tank to the trailer. A very small amount of product leaked from the emergency vent of the tank.

The prime mover remained upright but its fuel tank was punctured in the accident and approximately 200 litres of diesel fuel leaked on to the road.

The tank container was eventually lifted and placed, still on its side, on to another vehicle after which it was removed from the area.

The Local Authority attended and cleaned up the area, disposing of the contaminated absorbent to an approved landfill site.

## DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 16/86

### Accident Details:

**Date:** 3 November 1986

**Location:** Approximately 40 km north of Nullagine

**Dangerous Goods Involved:** Sodium Cyanide, Class 6.1  
UN No.1689, Packaging Group I  
Hydrochloric Acid, Class 8  
UN No.1789, Packaging Group II.

### Scenario:

On Monday, 3 November, in the early hours of the morning the third trailer of a triple-bottom road train comprising a semi-trailer and 2 flat-top trailers overturned on the soft, muddy shoulder of the road approximately 40 km north of Nullagine during or just after a fall of rain.

All 160 drums of cyanide on the rear trailer, fell from the truck and most were badly damaged but relatively few were split and very little product had spilt. The hydrochloric acid was on the semi-trailer of the vehicle combination and was not involved in the spillage.

Arrangements were made for expert advice to be obtained from the metallurgist of a nearby gold mine which used cyanide in its processing operation. A District Inspector of Mines who was scheduled to be in the area on that day also attended to ensure that clean-up was effected satisfactorily.

The damaged drums were removed from the site to a covered storage area, the contaminated ground was covered with clean earth and the area was rendered safe by 1500 hrs.

## DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 17/86

### Accident Details:

**Date:** 5 November 1986

**Location:** 9 km South of Overlander Roadhouse  
on the North West Coastal Highway

**Dangerous Goods  
Involved:** Ammonium Nitrate (Bulk)  
Class 5.1 UN No. 1942  
Packaging Group III

### Scenario:

The vehicle concerned was a rigid prime mover carrying bulk ammonium nitrate and towing 2 x 5 axle dog-trailers also loaded with bulk ammonium nitrate.

On Wednesday 5 November at 1500 hrs, the driver of the vehicle combination moved off the road on to the verge to avoid an approaching car and caravan. At that point, the shoulder of the verge was fairly steep and this caused the rear trailer to drop on to its side.

Approximately 28 tonnes of ammonium nitrate spilled from the trailer. The ammonium nitrate was not contaminated with any combustible material and the accident did not affect any other road users.

Main Roads Department personnel were working in the area of the accident and assisted with the clean up by grading a trench, depositing the ammonium nitrate in it and covering the area with soil. There are no water courses or reservoirs in the area.

The vehicle was subsequently righted with the assistance of other truck drivers and the damaged trailer was reconnected. It was then returned to Geraldton.

## DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 18/86

### Accident Details:

**Date:** 5 November 1986

**Location:** About 1.5 km along the West Swan Road north from the junction of Gnangara Road

**Dangerous Goods Involved:** Degreasing Fluid  
Class 3.2, UN No. 1223  
Packaging Group III

### Scenario:

On Wednesday, 5 November 1986, approximately 20-25 x 20 l drums fell from a semi-trailer along West Swan Road over a distance of about 1.5 km. Most of the drums contained lubricating oil but one contained flammable liquid of Class 3.2.

When the Division's Inspectors arrived, the vehicle was not at the scene of the spillage, having been taken to the road train assembly area at Apple Street, West Swan. It was examined at that location and was found to still have on board several more drums of flammable liquid.

The vehicle was not equipped with gates though the load was tightly secured with tarpaulins and ropes. It appeared that a drum at the base of the load had collapsed allowing the load to shift, the ropes to loosen and the drums to fall out of the gap between the tarpaulin and the tray of the vehicle.

The Local Authority attended on-site and spread sand over the affected area which was then swept up and disposed of in an approved land fill site.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 19/86

**Accident Details:**

**Date:** 22 November 1986  
**Location:** Service Station, Laverton  
**Dangerous Goods Involved:** Hydrochloric Acid  
Class 8, UN No. 1789  
Packaging Group II

**Scenario:**

On Saturday 22 November a cartage contractor, conveying 8 x 200 l drums of hydrochloric acid and general freight, was making deliveries in the Goldfields region.

One of the drums of acid was slowly leaking during transit and on arriving at the service station at 1030 hrs, the driver noticed that approximately 50 l of acid had collected on the steel tray. The Volunteer Fire Brigade (VFB) was called and Brigade personnel washed the acid off the vehicle. The washings ran into a soak pit on the adjoining premises.

Later the police arrived on the scene. They were not satisfied that the acid was sufficiently diluted, so the VFB was called out a second time and further diluted the acid.

The driver later continued his journey after the leaking drum was made safe.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 20/86

**Accident Details**

**Date:** 5 December 1986  
**Location:** Fuel depot, Busselton  
**Dangerous Goods Involved:** Kerosene  
Class 3.2, UN No. 1223  
Packaging Group III

**Scenario**

On Friday, 5 December at approximately 1330 hrs, the driver of a rigid tanker vehicle was self-loading (loading via vehicle pump) kerosene into one of the compartments of the vehicle tank, when a flash fire occurred and immediately self extinguished.

A hose with an automatic trigger nozzle was used to fill the tank compartment via the dip tube. The compartment had previously held diesel fuel.

Improper earthing of the filling system caused the accumulation of sufficient static electricity to ignite the kerosene-air mixture.

The driver received severe burns to the upper left arm.

**Note:** The practice of self-loading is prohibited under the provisions of the Dangerous Goods (Road Transport) Regulations 1983 except when approved by an inspector in emergencies.

DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 21/86

**Accident Details:**

**Date:** 28 November 1986

**Location:** Cnr Grandstand Road & Stoneham Street,  
Belmont

**Dangerous Goods Involved:** Preparation contained small percentages of FENFURAM and LINDANE which, though dangerous goods, were not in sufficient concentration to be classified.

**Scenario:**

On Friday, 28 November at approximately 1500 hrs, a small flat top rigid vehicle conveying packages of agricultural chemical preparation lost part of its load at a sharp right hand bend in the road.

Police and Fire Brigade attended the site where the substance "PAN O RAM" had been spilt.

The spilt product was recovered for disposal at an approved site.



DANGEROUS GOODS ROAD TRANSPORT ACCIDENT REPORT 22/86

**Accident Details:**

**Date:** 19 November 1986

**Location:** Great Eastern Highway, Rivervale

**Dangerous Goods Involved:** Calcium Hydroxide - under consideration for classification as dangerous goods.

**Scenario:**

On Wednesday, 19 November, at approximately 1230 hrs, a flat top dog trailer attached to a rigid tip truck lost 11 "bulka bags" (approximately 700 kg each) of agricultural/industrial lime when the load shifted during transport.

Police and Fire Brigade attended the site where a severe dust problem had been created by the broken bags.

Firemen were required to wear breathing apparatus while working to clean up the spillage.

The Great Eastern Highway was closed for approximately 3 hours while the spillage was cleaned up with a front end loader and shovels.