

# Australian Pipeline Industry Association - PIPELINE INCIDENT REPORT

## 1. Introduction

Thanks for providing your incident data to the Australian Pipeline Incident Database. Understanding incidents and near misses is an important tool for maintaining the pipeline industry's excellent safety record.

We are interested in your data if it meets either of the following definitions:

An INCIDENT is:

- \* Any damage to the coating or pipe caused by mechanical equipment or any other means, OR
- \* Any defect which causes a leak, requires repair of the pipe body or requires the MAOP to be reduced

A NEAR MISS is:

- \* Any land disturbance deeper than 300 mm within the pipeline easement (or within 6 m of the pipeline if no easement exists). Near misses includes excavation, auguring, boring, and driving of fence posts etc.

It is not necessary to report activities that are limited to the surface of the easement with only shallow or no disturbance of the ground.

## 2. Your Details

Before this incident is fully recorded in the database we will send you a copy of the data for confirmation. We may also need to contact you for clarification.

### \* 1. Please provide your contact details

Name:

Company:

Email Address:

Phone Number:

### 2. Your in-house incident report number

(Optional, may be useful for your internal cross-referencing to this incident)

**3. Pipeline Identification**

**1. Licence No.**

**2. State**

**\* 3. Pipeline Name (or from-to description)**

**4. Pipeline Owner (Licensee)**

**5. Operator**

## 4. Incident Description

\* **1. Date**

Date                    DD    MM    YYYY  
                           /  /

\* **2. Time**

Time                    HH    MM    AM/PM  
                           :

\* **3. Location of incident (KP)**

\* **4. Location description**

**(for urban areas include at least street name and suburb,  
for rural areas provide locality and best available description)**

\* **5. Incident description**

**(who did what and why - please tell the full story)**

**6. Are any photos available? (site, damage, repair, etc)**

**If yes please send to [apia@apia.asn.au](mailto:apia@apia.asn.au) with an explanatory note.**

No

Yes

## 5. Pipeline Details at Incident Location

\* **1. Pipe Diameter**

DN (mm)

\* **2. Pipe Wall Thickness (mm)**

\* **3. Steel Grade**

\* **4. Maximum allowable operating pressure**

MAOP, kPa

\* **5. Depth of Cover**

Depth (mm)

**6. Design Code**

AS 2885

Other

Other (please specify)

\* **7. Pipeline Age**

Age (years)

\* **8. Location Class**

R1

R2

T1

T2

**9. Operating Pressure at Time of Incident**

Pressure (kPa)

**10. Operating Temperature at Time of Incident**

Temp (deg C)

**11. Hydrostatic Test Pressure**

Pressure (kPa)

**12. Hydrostatic Test Date**

(if only the year is known enter 1 Jan)

Date  /  /

**13. Fracture Toughness**

Charpy Energy, 10 mm specimen, (Joules)

**14. Toughness Test Temperature (°C)**

## 6. Risk Assessment

**1. How many years since the last safety management study?**

**2. Was this threat identified in the safety management study?**

Yes

No

**3. Did the safety management study consider the threat to be controlled?  
(Please mark "N/A" if threat not previously identified)**

N/A

Yes

No

**4. Were threat management measures implemented to minimise the risk?  
(Please mark "N/A" if threat not previously identified, or considered to be fully controlled)**

N/A

Yes

No

**5. Risk assessment comments**

**(eg. Comment on how threat controls were bypassed, or on any additional risk management measures and their effectiveness)**

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## 7. Cause

Your response to this page affects the type of questions you will be asked about the incident.

### \* 1. What was the cause of the incident?

External interference

Corrosion

Erosion or earth movement

Lightning

Construction defect

Material defect

Other (please specify)

## 8. External Interference Details

### \* 1. Who caused the incident?

- Govt, shire or utility
- Govt, shire or utility contractor
- Property owner
- Property owner's contractor
- Pipeline operator
- Pipeline operator's contractor
- Other third party

### \* 2. Type of excavation equipment

- Hand tools
- Backhoe
- Excavator
- Auger (vertical)
- Horizontal bore or HDD
- Ripper or cable plough
- Bulldozer, grader or scraper
- Agricultural plough etc
- Other

Other (please specify)

### 3. Equipment size

Weight (tonnes)

### 4. Equipment make and model

### 5. Other information on external interference incident

(eg. provide information on the type of tooth on an excavator or the type of drill bit on an auger, etc)

## 9. External Interference Protection

### 1. Nearest Marker Post

Distance (m)

### 2. Patrol Frequency

Frequency (days)

### 3. Marker Tape

Yes

No

### 4. Concrete Slab or Encasement

Yes

No

### 5. Fenced Off

(unauthorised people excluded from easement)

Yes

No

### 6. Crash Barrier

Yes

No

### 7. Land Ownership

Private

Public

Road Reserve (crossing)

Road Reserve (parallel)

Other

Other (please specify)

### 8. How long ago was the last contact with the landowner?

(months)

### 9. How long ago was the last contact with the shire/utility/contractor?

(months)

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**10. Was the one-call service (dial-before-you-dig) used before the incident?**

Yes

No

**11. Did the pipeline operator respond to the one-call enquiry?**

**(Please mark "N/A" if no one-call enquiry.)**

N/A

Yes

No

**12. Was there on-site inspection by the pipeline operator in response to the one-call enquiry?**

**(Please mark "N/A" if no one-call enquiry.)**

N/A

Yes

No

**13. Did the incident result from a new land development? (subdivision, housing development, etc)**

Yes

No

**14. Was the development referred to the pipeline operator by the planning authority?**

**(Please mark "N/A" if incident was not the result of land development.)**

N/A

Yes

No

**15. Comment on external interference protection**

**(eg. other factors contributing to the incident including failure of the protection measures)**

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## 10. Damage or near miss?

NEAR MISS means there was no contact with the pipe

DAMAGE means anything else, from coating damage to rupture

### \* 1. What was the outcome of this incident?

Near miss

Damage

## 11. Corrosion details

### \* 1. Type of corrosion

External

Internal

SCC

### 2. How long since last in-line inspection?

Years

If corrosion was internal skip to Question 12

### \* 3. Linepipe coating type

Extruded HDPE

FBE (single layer)

FBE (dual layer)

Trilaminate

Enamel (coal tar or bituminous)

Tape wrap

Liquid applied coating

Other (please specify)

### 4. Linepipe coating condition

Bonded

Disbonded but protected

Disbonded but shielded

### 5. Further comment on linepipe coating

### 6. Joint coating type

Liquid-applied coating

Heat shrink sleeve

Tape

Same as linepipe

Other (please specify)

## 7. Joint coating condition

- Bonded
- Disbonded but protected
- Disbonded and shielded

## 8. Further comment on joint coating

## 9. Cathodic protection system

- Impressed current
- Galvanic anode
- None

## 10. Pipe-soil potential (mV Cu/CuSO<sub>4</sub>)

## 11. Other factors affecting external corrosion (eg. salinity, soil type, coating damage, etc)

  

If corrosion was external ignore the following questions

## 12. Internal lining - describe type and condition (bonded, disbonded, etc), if applicable

  

## 13. Fluid quality - describe properties of pipe contents that may have contributed to internal corrosion

  

## 14. Corrosion inhibitor used?

- Yes
- No

## 15. Other factors that may have contributed to internal corrosion

## 12. Other incident details

This question applies to incidents with causes other than external interference or corrosion, such as ground movement, lightning, or defects in design, materials or construction

### 1. Fully describe circumstances and events leading to incident



## 13. Damage details

DEFORMATION includes any type of dent, buckle or bend with NO GOUGE  
GOUGE includes gouges within a dent

### \* 1. Severity of damage

Coating Damage

Deformation

Gouge

Leak

Rupture

Corrosion/SCC (no leak)

### 2. Release ignited?

(Please mark "N/A" if no leak or rupture.)

N/A

No

Yes

### \* 3. Damage description

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### 4. Location of damage

Parent pipe

Girth weld

Seam weld

Comment (eg. note if damage was on a field or factory bend)

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### 5. Defect dimensions

Axial length, mm

Circumferential length, mm

Average depth, mm

Maximum depth, mm

## 6. Defect position

Circumferential position, o'clock

Distance from seam weld, mm

Distance from girth weld, mm

## 7. Critical defect length for rupture

Critical defect length, mm

14. Repair details

1. Type of repair

Cut out and replace

Welded sleeve

Mechanical clamp

"Clockspring"

Dress and re-coat

Re-coat

Other (please specify)

2. Repair description

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## 15. Costs and injuries

Please do not enter zeros on this page, instead just leave null answers blank

### 1. Effects on people

Number of fatalities

Distance of fatalities from incident, m

Number of injuries

Distance of injuries from incident, m

### 2. Effects on property

Property damage, \$

Distance of property from incident, m

### 3. Effects on supply

Period of failure to supply, hours

Period of reduced supply, hours

Volume of gas lost, '000 Sm3

Volume of liquid spilled, L

### 4. Costs

Repair cost, \$

Consequential losses, \$

### 5. Details of consequential losses, or any other comment on consequences of the incident

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## 16. Finish

Thanks for providing your data.

IMPORTANT: PLEASE EMAIL [apia@apia.asn.au](mailto:apia@apia.asn.au) to let us know that you have completed this survey, and include any photos or additional details.

We will send you a confirmatory email with details of the data entered, although this is a manual process and may take a week or so.

### **1. FEEDBACK - feel free to make any comment that would help us improve this incident data survey**

Thanks again. Don't forget to send the email letting us know you've completed the survey.