



Government of **Western Australia**  
Department of **Mines, Industry Regulation and Safety**

## **Petroleum safety – guide**

### **Reporting of accidents, incidents and dangerous occurrences**

**February 2020**

## Disclaimer

The information contained in this publication is provided in good faith and believed to be reliable and accurate at the time of publication. However, the information is provided on the basis that the reader will be solely responsible for assessing the information and its veracity and usefulness.

The State shall in no way be liable, in negligence or howsoever, for any loss sustained or incurred by anyone relying on the information, even if such information is or turns out to be wrong, incomplete, out-of-date or misleading.

In this disclaimer:

**State** means the State of Western Australia and includes every Minister, agent, agency, department, statutory body corporate and instrumentality thereof and each employee or agent of any of them.

**Information** includes information, data, representations, advice, statements and opinions, expressly or implied set out in this publication.

**Loss** includes loss, damage, liability, cost, expense, illness and injury (including death).

## Creative commons

The State of Western Australia supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 4.0 International (CC BY) licence.

Under this licence, with the exception of the Government of Western Australia Coat of Arms, the Department's logo, any material protected by a trade mark or licence and where otherwise noted, you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

We also request that you observe and retain any copyright or related notices that may accompany this material as part of the attribution. This is also a requirement of the Creative Commons Licences.

For more information on this licence, visit [creativecommons.org/licenses/by/4.0/legalcode](https://creativecommons.org/licenses/by/4.0/legalcode)

## Contact

This publication can be available on request in other formats for people with special needs.

Further details of safety publications can be obtained by contacting:

Safety Regulation Group – Regulatory Support

Department of Mines, Industry Regulation and Safety

100 Plain Street

EAST PERTH WA 6004

Telephone: +61 8 9358 8001

NRS: 13 36 77

Email: [SafetyComms@dmirs.wa.gov.au](mailto:SafetyComms@dmirs.wa.gov.au)

## **Guides**

A guide is an explanatory document that provides more information on the requirements of legislation, details good practice and may explain means of compliance with standards prescribed in the legislation. The government, unions or employer groups may issue guidance material.

Compliance with guides is not mandatory. However, guides could have legal standing if it were demonstrated that the guide is the industry norm.

This Guide has an operations focus and is set out in the context of risk assessment and legislative requirements of all responsible persons. Consequently, each operation needs to understand its limitations and skills base.

The Guide is based on current experience and is not claimed to be complete.

## **Who should use this Guide?**

You should use this Guide if you are responsible for accident, incident and dangerous occurrence reporting and investigation into incidents that have taken place on a facility.

# Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Scope and objective of this Guide.....	1
1.2	Definitions and abbreviations .....	1
<b>2</b>	<b>Identifying reporting requirements</b> .....	<b>1</b>
<b>3</b>	<b>What does the Department do with any reports?</b> .....	<b>2</b>
3.1	Reports and freedom of information (FOI).....	2
<b>4</b>	<b>Reporting accidents, incidents and dangerous occurrences</b> .....	<b>3</b>
4.1	Statutory reporting of accidents, incidents and dangerous occurrences .....	3
4.1.1	Interference with accident sites .....	4
4.2	Voluntary reporting of serious or unusual incidents and occurrences .....	4
4.3	How to report to the Department .....	4
4.3.1	Reporting to other agencies.....	6
4.4	Investigations.....	6
4.4.1	Department involvement in an investigation .....	6
4.5	Creation of corrective and preventive actions.....	7
4.6	Close out of the investigation report .....	7
4.7	Ongoing monthly reporting .....	7
	<b>Appendix 1 Legislative provisions</b> .....	<b>8</b>
	<b>Appendix 2 References and acknowledgements</b> .....	<b>8</b>
	<b>Appendix 3 Glossary</b> .....	<b>9</b>
	<b>Appendix 4 Further information</b> .....	<b>10</b>

# 1 Introduction

This document has been developed to provide assistance and guidance to licensees and operators to meet the Western Australian petroleum safety legislation administered by the Department of Mines, Industry Regulation and Safety (the Department).

The legislation covered by this Guide is listed in Appendix 1.

## 1.1 Scope and objective of this Guide

This Guide has been developed to provide licensees and operators with assistance to meet their obligations in regard to reporting accidents, incidents and dangerous occurrences.

The objective is to provide clarity to both industry and Department personnel on areas of the legislation which may be ambiguous or open to interpretation.

The following appendices are included:

Appendix 1 Legislative provisions

Appendix 2 References and acknowledgements

Appendix 3 Glossary of terms

Appendix 4 Further information

## 1.2 Definitions and abbreviations

Definitions and abbreviations are included in Appendix 3 Glossary of terms.

# 2 Identifying reporting requirements

There are two types of reports that licensees or operators need to be aware of regarding accidents, incidents and dangerous occurrences.

The first type is statutory reporting. These are occurrences that must be reported to the Department and must be done so within specific timeframes. Licensees and operators should refer to the appropriate legislative requirements for their facility. These are listed in Appendix 1.

The second type is voluntary reporting. There are many circumstances where advising the Department of an occurrence is of benefit to both the Department and the licensee or operator and, potentially, to wider industry.

*Note: where reference is made to occurrences that are a hazard to the surrounding environment, licensees and operators should refer to the relevant environmental regulations that are in place under each of the Acts covered by this Guide as it may be necessary to report the occurrence to both the Critical Risks and the Environmental Compliance branches of the Department.*

Reporting an event of any nature to the Department is never seen by the Department as a failure of the licensee or operator, or other negative positions. The Department sees reporting first and foremost as an opportunity for the licensee or operator, the Department and wider industry to learn and to prevent the same or similar events happening elsewhere. When determining when to report, the default position should be "if in doubt, report it".

### 3 What does the Department do with any reports?

The Department uses the information in reports from licensees and operators for a range of purposes. An inspector may use the information to help determine what action, if any, is required to help identify the cause of an incident. It is also used by inspectors to review the workings of the licensee or operator to ascertain whether the safety case needs to be reviewed and updated to cover an unforeseen hazard.

Information from the reports is also used by inspectors to pass on lessons learned from similar occurrences to other licensees and operators, thus providing information that may support a case for continual improvement of their safety management systems. This information sharing is done verbally at liaison meetings, and via safety bulletins and articles in Department publications.

The Department can share details of an event with other regulators such as the Environmental Protection Agency (EPA), the National Offshore Petroleum Environment Management Authority (NOPSEMA) or the Department of Fire and Emergency Services (DFES). The Department will also ensure that government officers are appropriately informed about accidents and dangerous occurrences in a timely and proper manner to enable those government officers to respond to media or public queries relating to a particular occurrence.

The other principal use of incident reporting data is in the many public reports that the Department must provide. These reports are not about specific incidents nor about specific operators but are global industry wide statistics such as “total number of reportable incidents for the year”.

It is important to note that the Department is not a first responder in the event of an incident. The Department does not and will not provide any on-site emergency response.

#### 3.1 Reports and freedom of information (FOI)

There is often concern by licensees and operators about the public release of incident reports provided to the Department. These concerns are often based around perceived reputational damage or exposure to litigation if the report is made public or released to third parties. All information provided to the Department is treated as confidential. In the event of an FOI request, the originator of the report must be asked whether they object to the release of the information before any release is made. The *Freedom of Information Act 1992* specifies what can and cannot be released.

## 4 Reporting accidents, incidents and dangerous occurrences

It is critical that licensees and operators have an appropriate reporting procedure and process in place for all accidents and dangerous occurrences.

### 4.1 Statutory reporting of accidents, incidents and dangerous occurrences

A statutory reportable occurrence must be reported to the Department within 24 hours of the occurrence taking place or the licensee or operator becoming aware of the occurrence.

The following occurrences are examples only. Licensees and operators must refer to the specific legislative requirements for reporting dangerous occurrences that are applicable to their facility. If further clarification is required, then the licensee or operator should speak to an inspector for guidance on whether or not a statutory report is required.

The occurrences that are statutory reportable are:

- fatality, or an occurrence that could reasonably be expected to cause a fatality
- serious harm or injury to personnel, or an occurrence that could reasonably be expected to result in serious harm or injury
- any harm or injury resulting in a lost time injury (LTI) (>3 days for offshore facilities; >1 day for onshore facilities)
- fire or explosion
- collision of a marine vessel with a facility
- an uncontrolled release of hydrocarbon vapour exceeding 1 kg
- An uncontrolled release of petroleum liquids exceeding 80 litres
- a well kick exceeding 50 barrels
- damage to any safety critical equipment
- any unplanned event that required the emergency response plan to be implemented
- the release of an amount of hydrocarbon vapour that is likely to constitute a hazard to the surrounding environment
- a release of an amount of petroleum liquid that is likely to constitute a hazard to the surrounding environment
- any other occurrence that a reasonable licensee or operator would consider to require immediate investigation, for example:
  - any occurrence of an electrical shock involving a power supply capable of directly producing a fatal electric shock (electrocution)
  - any medical evacuation from a facility due to injury or illness
  - an acute or chronic occurrence resulting in the inability of a control measure (identified as being necessary to reduce risk of one or more MAEs to ALARP) to meet its performance standard (damage to safety critical element)
  - any unplanned activation of a general alarm leading to a muster
  - any occurrence involving anchors being dropped or dragged at or near a pipeline.

### **4.1.1 Interference with accident sites**

For all accidents involving a fatality or a serious injury, licensees and operators must ensure that once the accident location has been made safe, there is no interference with the accident site until a Department inspector has attended or given permission to do so. Arrangements should be made to cordon off the accident area to prevent any unauthorised access.

## **4.2 Voluntary reporting of serious or unusual incidents and occurrences**

Licensees or operators may have events that, while serious or unusual, do not come under the types of events that are legislated as reportable and they are not obliged to report the event. However, reporting these events to the Department provides significant benefits to the Department, licensees or operators and wider industry. Examples include the discovery of a serious design flaw in a piece of commonly used equipment, an incident where public or media interest is likely, or routine maintenance finds that an emergency system (such as fire suppression) is degraded.

One of the signs of a robust safety management system is the willingness of the licensee or operator to report events. It is the equivalent of the expectation that they have for their employees to report incidents. It allows the licensee or operator to demonstrate to the Department, in near real time, that not only are they aware of an incident, they are treating the event in accordance with the safety case procedures and that risks and hazards are being appropriately managed.

The position of the Department is similar to that held by the licensee or operator for their employees – if in doubt, report it.

Licensees and operators should have no hesitation calling their inspector to discuss events that have arisen and ascertaining if a formal report is required. Inclusion of occurrences relating to design or material issues or failures could be shared, as appropriate, through the quarterly meeting program between inspectors and licensees and operators.

## **4.3 How to report to the Department**

For statutory events, the licensee or operator must notify the Department either verbally or via email within 24 hours of the occurrence happening, or within 24 hours of the licensee or operator becoming aware of the occurrence.

The initial notification should then be followed within three days by written notification of the occurrence using the relevant [onshore](#) or [offshore](#) occurrence report form available from the Department website.

The relevant contact points within the Department should be identified within the relevant safety case.

There are publically listed mobile contact numbers on the Department website; however, these are not manned 24 hours per day.

If there is any doubt about whether or not an occurrence should be reported to the Department, the licensee or operator should contact the Department to discuss and obtain guidance in relation to reporting.

Figure 1 depicts the steps required for reporting accidents, incidents and dangerous occurrences to the Department.

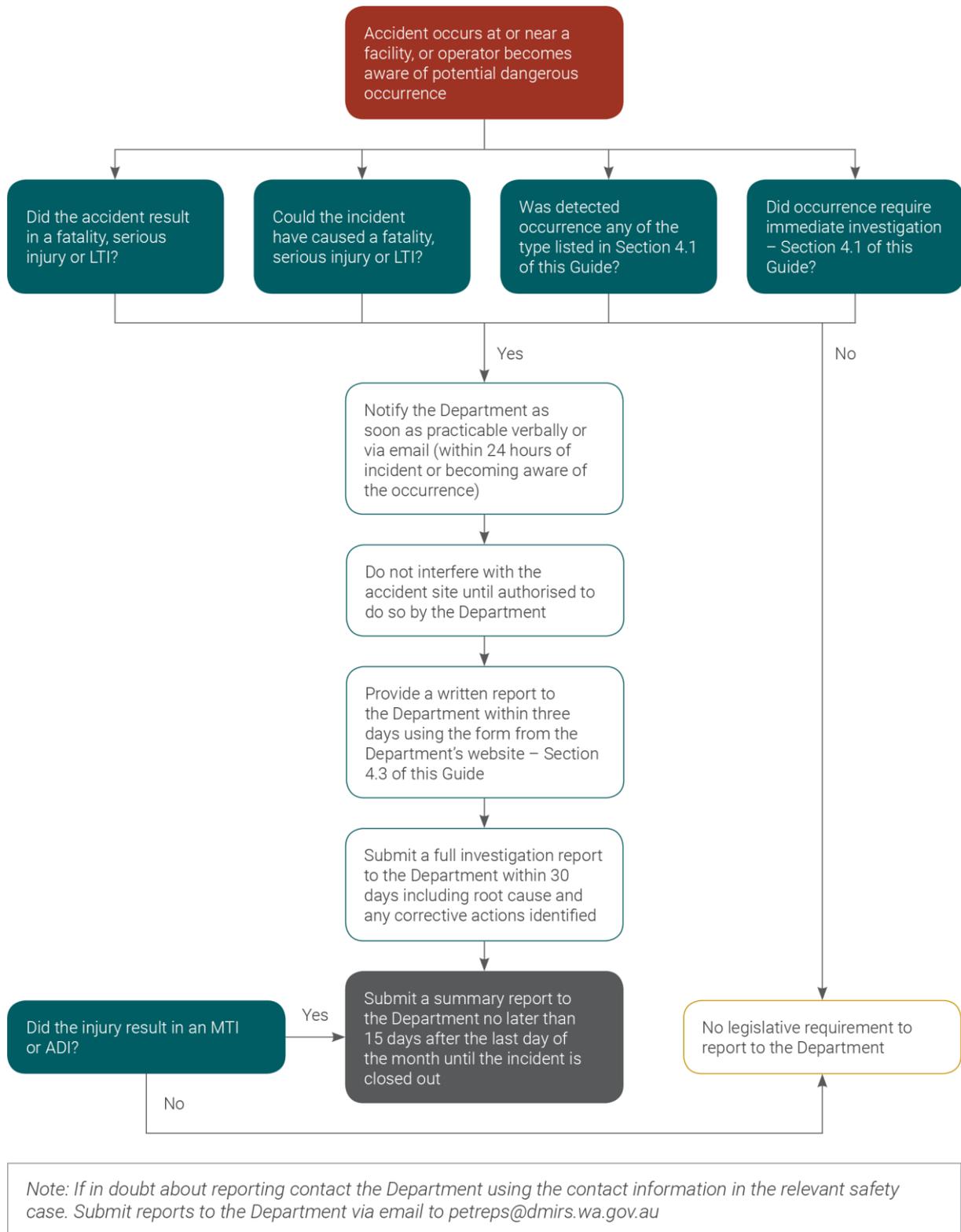


Figure 1 Notification and reporting of accidents, incidents and dangerous occurrences

### **4.3.1 Reporting to other agencies**

It is important that licensees and operators are aware of the reporting requirements of other agencies for dangerous occurrences and accidents.

For example, where an occurrence results in death or injury to personnel and has been caused by electrical shocks, the licensee or operator must also report to the Department's Building and Energy division (formerly Energy Safety WA) as required under the Electricity (Licensing) Regulations 1991. These regulations require that all electric shocks and accidents irrespective of their seriousness must be reported to:

- the employer (if relevant), and
- the relevant network operator (i.e. supply authority) or, if the person making the report cannot identify the relevant network operator, to the Director of Energy Safety and the Building Commissioner.

## **4.4 Investigations**

Once the initial report has been made to the Department, licensees or operators must commence a full investigation into the accident or dangerous occurrence.

The purpose of an investigation is to determine the root cause of the event, to define the circumstances that caused the event to happen and to examine the effectiveness of the barriers preventing the event from occurring, and the controls of the event after it occurred. It is fundamental to determine why the event happened the way it did and to identify what can be learned to prevent it happening again.

An investigation report should be completed and submitted to the Department within 30 days and include:

- a full description of the accident or dangerous occurrence
- a timeline of what happened at the facility provided by people who witnessed the occurrence, and the steps taken to remedy the occurrence and make the facility safe
- a root cause analysis of why and how the occurrence happened
- details of all corrective and preventive actions identified to prevent a recurrence of the issue and, where applicable, the instigation of these actions across similar sites as a preventive measure and continual improvement of the applicable systems.

The Department often finds that the quality and depth of investigations varies considerably. The Department expects that investigations are robust, detailed and thorough. The quality of an investigation report is seen by the Department as a strong indication of the quality of the licensee's or operator's safety management system and as a reflection of their commitment to safety.

### **4.4.1 Department involvement in an investigation**

The involvement of the Department in investigations will depend on the severity of the event. For the majority of investigations, the Department will leave the investigation to the operator. However, the Department may:

- engage with the operator throughout the investigation process on the progress of the investigation
- be part of the operator's investigation team
- lead the licensee's or operator's investigation
- conduct an independent investigation.

Licensees and operators should take into account that significant accidents or dangerous occurrences may also be investigated by inspectors. It is essential to fully document all events leading up to the occurrence, as well as actions taken following the identification of the occurrence with details of times and dates, and a description of the action taken and by whom.

## **4.5 Creation of corrective and preventive actions**

The licensee or operator must have in place a suitable system to manage the corrective and preventive actions.

All actions must be assigned to appropriately competent personnel to complete the required work. A realistic timeframe must be applied for the completion of the action assigned and testing that the completed work is sufficient to fix and prevent a repeat of the issue that caused the occurrence.

## **4.6 Close out of the investigation report**

The investigation report should be monitored to ensure that all actions created within the report are completed and managed through to effective closure.

Once this has been accomplished, then the investigation report can be closed and a close out report sent to the Department showing details of the work completed against each action, by whom and the date of completion and closure.

## **4.7 Ongoing monthly reporting**

Ongoing monthly reports must be submitted to the Department ([petreps@dmirs.wa.gov.au](mailto:petreps@dmirs.wa.gov.au)) by the 15<sup>th</sup> of each month. These reports detail the status of all open accidents and dangerous occurrences.

Refer to *Guide to petroleum occurrence report forms and Petroleum monthly status report forms* available from the Department's website for further information and assistance for completion of this requirement.

## Appendix 1 Legislative provisions

### **Petroleum (Submerged Lands) (Management of Safety of Offshore Facilities) Regulations 2007**

- r. 50 Dangerous occurrence
- r. 51 Period of incapacity for work caused by an accident at a facility

### **Petroleum (Submerged Lands) (Pipelines) Regulations 2007**

- r. 53 Dangerous occurrence
- r. 54 Period of incapacity for work caused by an accident at a facility

### **Petroleum and Geothermal Energy Resources (Management of Safety) Regulations 2010**

- r. 41 Dangerous occurrence
- r. 42 Period of incapacity for work caused by an accident at a facility

### **Petroleum Pipelines (Management of Safety of Pipeline Operations) Regulations 2010**

- r. 42 Dangerous occurrence
- r. 43 Period of incapacity for work caused by an accident at a facility

## Appendix 2 References and acknowledgements

Development of this guide has used:

- NOPSEMA suite of guidance notes

## Appendix 3 Glossary

**ADI.** Alternate duties injury.

**ALARP.** As low as reasonably possible.

**DFES.** Department of Fire and Emergency Services

**Electrical accident.** An incident which required medical or first aid treatment and includes fatalities.

**Electric shock.** An incident which does not require medical or first aid treatment.

**EPA.** Environmental Protection Authority.

**Facility.** The term facility has been adopted throughout this document to cover offshore and onshore facilities and pipelines including aboveground structures associated with onshore pipelines.

**FOI.** Freedom of Information.

**LTI.** Lost time injury – >3 days for offshore occurrences; >1 day for onshore occurrences.

**MAE.** Major accident event – an event connected with a facility, including a natural event, having the potential to cause multiple fatalities of persons at or near the facility (or as defined within the relevant legislation pertaining to a facility).

**MTI.** Medically treated injury.

**NOPSEMA.** National Offshore Petroleum Safety and Environmental Management Authority

**Safety case.** In this document covers all safety management systems, plans and other safety-related documents referred to in Western Australian legislation.

**Safety critical element.** Any item of equipment, system, process, procedure or other control measure which fails can contribute to an MAE.

**SPAEE.** Significant pipeline accident event – an event that:

- a) is connected (whether immediately or after delay) with work carried out on, or in relation to, a pipeline
- b) causes, or creates a significant risk of causing, human death (for example, because of hydrocarbon releases).

## Appendix 4 Further information

Other guides available:

- *ALARP demonstration*
- *Audits, review and continual improvement*
- *Bridging documents and simultaneous operations (SIMOPS)*
- *Diving safety management system*
- *Emergency planning*
- *Hazard identification*
- *Involvement of members of the workforce*
- *Major accident events, control measures and performance standards*
- *Management of change*
- *Offshore facility safety case*
- *Pipeline management plan*
- *Pipeline operation safety case*
- *Records management including document control*
- *Risk assessment and management including operational risk assessment*
- *Safety management system*