SMS SAFETY MANAGEMENT SYSTEMS

August 2021

Incident investigation – Quick Guide

What is an incident investigation?

An incident investigation is a coordinated activity undertaken to establish how and why an incident occurred. You can use this guide to help investigate any incident, be it heavy vehicle, Work Health and Safety (WHS) or environment.

Why investigate incidents?

Incidents and 'near misses' need to be investigated so that you can identify areas of your business, including your Safety Management System (SMS), that can be improved. More importantly, an incident investigation will allow you to put steps in place to prevent a similar incident from occurring and also enable you to demonstrate appropriate action has been taken to improve safety following an incident.

How you can investigate incidents

When undertaking incident investigations, your aim should be to build a complete picture of the event and identify the factors that contributed to it.

Incident investigations are often conducted by a supervisor or manager but can be more effective if you involve others in the business and, if necessary, external people with relevant expertise.

Important principles to keep in mind when undertaking an investigation include:

- Approach investigations from a neutral standpoint, without any preconceived thoughts of how or why the incident happened.
- Remember that incidents are usually the result of a number of contributing factors that occur and rarely the result of one person's actions.
- The purpose of an incident investigation should be to improve how your business manages safety and not to apportion blame.

Incident investigation process

The incident investigation process involves five key steps (detailed descriptions follow):

Step	Action
1	Collecting the information
2	Analysing the information
3	Recommending safety improvements
4	Implementing safety improvements
5	Communicating the investigation findings and outcome

Before commencing an investigation

IMPORTANT: You must consider the following notification requirements before commencing an investigation.

Depending on the severity of the incident, the WHS regulator may need to be notified. In the case of a notifiable incident, a WHS Inspector will advise whether an inspection is required or the site can be cleared. A full explanation of the terms 'incident notification' and 'notifiable incident' can be found on your local WHS regulator's website.

There may also be a requirement to notify your local Environmental Protection Authority (EPA) for certain environmental incidents. A full explanation of this requirement can be found on your local EPA's website.

Step 1. Collecting the information

Collecting information relating to an incident is important and should always be undertaken in a timely manner. The initial inspection of the incident site needs to happen as soon as possible after the event, especially if there is evidence that may be affected due to events such as adverse weather, the need to move the vehicle or clean up the incident site.

When collecting information, be prepared to take photos and/or video footage. Take a variety of photos, including close-ups and distance shots. When taking close-up photos, consider including a measuring item to indicate scale.

Throughout the investigation, it's likely that you'll need to gather information from a number of sources. A structured approach when collecting information about an incident should consider the following aspects:

- **People** – interviews, statements and observations
- **Environment** – incident scene, weather conditions and the work task
- **Equipment** – vehicles, machinery and tools, including operation and maintenance
- **Processes and procedures** – policies, procedures, fact sheets, guidelines and reports
- **Organisation and management system** – risk management, investigations, supervision, training and communication records

Ask the **Who, What, When, Where, Why** and **How** questions for each category.

NHVR

www.nhvr.gov.au/sms

File Name: Incident investigation – Quick Guide-v1.0

Step 2. Analysing the information

Reconstruct the event

In reconstructing the event, you should seek to understand the incident itself and the series of actions or steps that immediately led to the incident. If required, consider involving others in the business or external parties to draw on their experience to help you analyse your information and findings.

Reconstructing the incident could be a simple discussion looking at the information you have gathered and to consider what happened. This will help you communicate your findings and explain how the different factors may have contributed to why the incident occurred. During this step, you may also identify the need to go back and collect more information.

Contributing factors

After reconstructing the event you need to identify the factors that could have contributed to the incident. To assist with identification you can look at the risk controls that are in place and identify if any were not followed or failed. You would also review the information gathered from the variety of sources (as listed in Step 1.) looking for failures and omissions.

One technique used to identify the underlying or single root cause involves asking, 'Why did this happen?' and continuing to ask 'Why' for each response until you reach a conclusion that does not generate another 'Why'. The root cause may become apparent but more often you will find a number of contributing factors.

Whether you find the root cause or a number of contributing factors, it's then important to establish the recommended safety improvements to prevent a similar incident happening in the future.

Step 3. Recommending safety improvements

This step involves taking the information you've gathered and recommending improvements to safety within your business to prevent a similar incident from occurring again. When considering the recommendations ask questions such as:

- What is the likelihood of the event happening again?
- What would the consequence or impact to my business be if it did?
- What methods are available to eliminate or minimise the identified safety issues so far as is reasonably practicable?
- What is the cost of implementing these measures?

It's important to **document the process you followed in your investigation** and record your findings so you can demonstrate (if required) that you've taken sufficient action to address the incident itself, and considered and implemented the necessary corrective actions. Your aim is to prevent a similar incident from happening again and at the same time improve the safety of your transport activities. Documenting this is commonly undertaken in an incident investigation report. A template and worked example is available on the NHVR website.

> The focus of an incident investigation is to improve the safety of operations and not to apportion blame.

Step 4. Implementing safety improvements

To implement safety improvements, as a business owner or supervisor, you will first need to review the recommendations, particularly if the report has been prepared by another manager or another party, and make decisions to accept, partially accept or reject each recommendation. To make a decision you need to consider what is reasonably practicable relating to the risk and the likelihood of the incident happening again.

You should also consider allocating the various improvement tasks to individuals in your business as well as allocating timeframes with expected completion dates. It is important to follow up to ensure that all the improvement tasks have been completed.

Step 5. Communicating the investigation findings and outcome

Once your recommendations have been considered and you're well on the way to completing your investigation process, it's important to share the findings and lessons learnt from the incident with all involved parties (internally and externally). You may consider discussing these at a toolbox meeting or safety briefing, or producing a safety alert document.

It's important to incorporate any necessary changes you make into your training programs and relevant policies and procedures as part of improving your SMS.

> On the NHVR website there is a template and worked example for incident investigations. You can change the template to suit your requirements.