Title	Conduct an incident investigation at an extractive site		
Level	5	Credits	8

Purpose	People credited with this unit standard are able to: identify relevant legislation, regulations and company procedures related to incident investigation; explain the concepts of multiple causation and root-cause analysis; and conduct an incident investigation using a recognised incident causation model at an extractive site.
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Classification	Extractive Industries > Extractive Industries Management	

Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
 - Health and Safety at Work Act 2015 (HSW);
 - Health and Safety at Work (General Risk and Workplace Management) Regulations 2016:
 - Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;
 - Health and Safety at Work (Mining Operations and Quarrying Operations)
 Regulations 2022;
 - Health and Safety at Work (Hazardous Substances) Regulations 2017 and related Safe Work Instruments (SWIs) published by WorkSafe NZ;
 - approved codes of practice issued pursuant to the HSW Act;
 - Hazardous Substances and New Organisms Act 1996;
 - Occupational health and safety guidelines, available at https://worksafe.govt.nz/.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definition

Company procedures mean the documented methods for performing work activities, and include health and safety, operational, environmental, and quality management requirements. They may refer to legislation, regulations, guidelines, standard operating procedures, manuals, codes of practice, or policy statements.

3 Assessment information
This unit standard is intended for, but is not limited to, workplace assessment.

A simulated situation and/or case study may be used for assessment against this unit standard.

4 Recommended for entry
It is recommended that learners have achieved Unit 26855, *Analyse Human Factors*present in workplace practices at an extractive site or equivalent knowledge or
experience.

Outcomes and performance criteria

Outcome 1

Identify relevant legislation, regulations and company procedures related to incident investigation.

Performance criteria

- 1.1 Legislation, regulations and standards relating to incident investigation for an extractive site are identified and referenced.
- 1.2 Company procedures and policies related to incident investigation and reporting for an extractive operation are described and referenced.

Outcome 2

Explain the concepts of multiple causation and root-cause analysis.

Performance criteria

- 2.1 The need for focus on management systems in incident investigation is explained in terms of preventing further incidents.
- 2.2 Incident causation models are identified in relation to the potential consequences of the incident.

Range may include but not limited to – PEEPO (People, Environment, Equipment, Procedures, Organisation), Five Whys, ICAM (Incident Cause Analysis Method); evidence of a minimum of two models

2.3 The concepts of multiple causation and root-cause analysis are explained in relation to a one recognised incident causation model.

Outcome 3

Conduct an incident investigation using a recognised incident causation model at an extractive site.

Performance criteria

3.1 The investigation is carried out using a recognised incident causation model.

Range sources for the investigation may include but are not limited to – witnesses, physical evidence, interviews, documentation.

The required level of investigation is determined in terms of the potential consequences of the incident and in accordance with company procedures, the HSW Act 2015, and Mining Operations and Quarrying Operations (MOQO) regulations.

Range types of incident may include but are not limited to – near miss, reportable incident, serious harm incident, fatality, high potential.

- 3.3 Data is sorted into chronological order.
- 3.4 Root causes and contributing factors of the incident are determined from the data gathered.
- 3.5 The possible corrective actions are formulated in response to the identified root causes that are proportionate to the risk in accordance with the hierarchy of controls and company procedures.

Range correctives actions may relate to – elimination of risk, isolation, engineering controls, changes to standard operating procedures, training requirements.

- 3.6 Implementation, timelines, review of effectiveness and planned maintenance of corrective actions are described in accordance with company procedures.
- 3.7 Incident investigation report is finalised and communicated in accordance with company procedures, and the HSW Act 2015 and MOQO regulations.

Planned review date	31 December 2029

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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 July 1999	31 December 2017
Review	2	27 January 2005	31 December 2017
Rollover and Revision	3	16 July 2010	31 December 2017
Review	4	18 June 2015	31 December 2026
Rollover and Revision	5	25 January 2018	31 December 2026
Review	6	30 January 2025	N/A

Consent and Moderation Requirements (CMR) reference	0114
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This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.