

Title	Research and analyse a current industry issue or opportunity in Minerals Industry Risk Management		
Level	7	Credits	20

Purpose	This unit standard covers the application of minerals industry risk management technology to a current industry issue or improvement opportunity through research and analysis. People credited with this unit standard are able to: scope a formal project for research and analysis of a minerals industry issue or improvement opportunity, and set parameters for the project; complete a literature review of the chosen industry issue or opportunity; research and analyse the industry issue or opportunity; and complete a report of the research and analysis.
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Classification	Extractive Industries > Extractive Industries Management
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Available grade	Achieved
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Guidance Information

- Performance of the outcomes of this unit standard must comply with the following:
 - 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 (Hazardous Substances) Regulations 2017 and related Safe Work Instruments (SWIs) published by WorkSafe NZ;
 - Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;
 - Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016;
 - and approved codes of practice issued pursuant to the HSW Act;
 - Introduction to the Health and Safety at Work Act 2015 – Special Guide*, available at <http://www.worksafe.govt.nz/worksafe/information-guidance/legal-framework/introduction-to-the-hsw-act-2015/special-guide>;
 - Crown Minerals Act 1991;
 - Hazardous Substances and New Organisms (HSNO) Act 1996;
 - and company procedures.
- 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.
- This unit standard is intended for, but is not limited to, workplace assessment.

4 Definitions

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.

Risk is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.

Risk analysis and/or evaluation is a systematic use of available information to determine how often specified events may occur and the magnitude of their consequences.

Risk assessment is the overall process of risk analysis and/or risk evaluation.

Risk control is that part of risk management which involves the implementation of policies, standards, procedures and physical changes to eliminate or minimise adverse risks.

Hazard is a source of potential harm or a situation with a potential to cause loss. Hazards in the workplace may relate to equipment, methods/plans, competencies and/or the work environment.

An annotated bibliography refers to the recording in note form of the contributions of each literary source to the understanding of the chosen industry issue or opportunity.

Literature review is an evaluative report of information found in the literature related to a chosen area of research. For the purposes of this unit standard it is more than a simple search for information, and goes beyond a descriptive list of the material available, or a set of summaries, which is commonly referred to as an annotated bibliography.

- 5 The report produced for this unit standard in outcome 4 must include the following sections – executive summary/abstract, introduction, context/background, objectives/scope/hypothesis, method of research/analysis, findings, encountered constraints, options considered, discussion(s), conclusions, recommendations for action, proposals for future work, references, appendices.

Outcomes and performance criteria

Outcome 1

Scope a formal project for research and analysis of a minerals industry issue or improvement opportunity, and set parameters for the project.

Performance criteria

- 1.1 An industry issue or improvement opportunity is identified that is of current interest to the minerals industry in relation to the improvement of risk based decision-making.
- 1.2 Project parameters are set which ensure that the research is of a manageable size appropriate for the final report.

1.3 A plan is developed to address full consideration of the selected industry issue or opportunity.

Range full consideration must include – hypothesis for improvement, threat/opportunity/hazard analysis, risk management strategies, detailed justification of chosen objectives, consideration of human factors, options for implementation.

1.4 A timeline of research milestones is developed.

Range the timeline must include – the deliverables or achievements for each project milestone, the resources that will be needed.

Outcome 2

Complete a literature review of the chosen industry issue or opportunity.

Performance criteria

2.1 The literature review identifies previous work that has relevance to significant aspects of this research.

Range literature may include but is not limited to – journal articles, books, conference papers, seminars, company reports, web articles.

2.2 Existing literature related to the chosen industry issue or opportunity is analysed to give justification to the way in which this research will fit into the existing body of knowledge.

2.3 The strengths and weaknesses of the existing literature are analysed in order to identify their impact on this research.

2.4 A consistent style of referencing is used.

Outcome 3

Research and analyse the industry issue or opportunity.

Range research may include – use of existing data, designing a study that gathers new data for the purpose.

Performance criteria

3.1 The industry issue or opportunity is researched and analysed thoroughly to enable detailed discussion of associated issues and justification of proposed options.

Outcome 4

Complete a report of the research and analysis.

Performance criteria

- 4.1 The report is addressed to a level of management with the authority to carry through the recommendations.
- 4.2 The report describes how the industry issue or opportunity was researched and analysed.
- Range may include, in the relevant report section, discussion of – scoping work, literature review, threat/opportunity/hazard analysis, risk assessment, risk management strategies, risk control strategies, action management.
- 4.3 Conclusions and recommendations are supported by the research.
- 4.4 Appendices provide support for the text of the report.
- Range appendices may include – scope documentation, assessment tables, detailed process descriptions, risk management system details, literature review.
- 4.5 The report reflects current concepts, principles and techniques of risk management in the minerals industry, as described in company procedures.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 February 2007	N/A
Rollover and Revision	2	25 January 2018	N/A

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

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.