Title	Demonstrate knowledge of emergency shutdown procedures at a sand extractives site			
Level	2		Credits	6
Purpose		People credited with this unit standard are able, at a sand extractives site, to describe: the safety rules for the operation of mining plant and equipment; the emergency shutdown systems; and the documentation required in the event of an emergency shutdown.		
Classification		Extractive Industries > Surface Extraction		

Available grade	Achieved

Prerequisites	Unit 17696, Describe and apply basic skills and knowledge required to work at a surface extraction site, or demonstrate equivalent skills and knowledge

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 (Mining Operations and Quarrying Operations) Regulations 2016:

Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016.

- 2 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.
- 3 Definition
 - Industry best practice refers to those practices which competent practitioners within the industry recognise as current industry best practice. These may be documented in management plans, industry best practice or requirements, managers' rules, occupational health and safety policy, industry guidelines, codes of practice, manufacturers' instructions, safe working and/or job procedures (or equivalent).

Outcomes and performance criteria

Outcome 1

Describe the safety rules for the operation of mining plant and equipment at a sand extractives site.

Performance criteria

1.1 The safety rules and procedures are described in relation to mining plant and equipment on-site and industry best practice.

Range may include but is not limited to – bucket wheel excavators, belt wagons, hopper/cable reel cars, moveable conveyors, main conveyors, stackers, mining ancillary equipment, dredges.

1.2 The safety rules and procedures are described in relation to processing plant and equipment on-site and industry best practice.

Range may include but is not limited to – primary feed systems, magnetic separators, gravity separation systems, scrubbers, cyclones, recyclable water systems, tailings disposal, screening systems.

1.3 The safety rules and procedures are described in relation to slurry pumping plant and equipment on-site and slurry pumping operation.

Range may include but is not limited to – tailings lines and pumps, slurry pumping system and pumps, cyclones.

1.4 The safety rules and procedures are described in relation to stockpiles.

Range may include but is not limited to – feeders, stackers, re-claim, operating on stockpiles.

1.5 The safety rules and procedures are described in relation to control rooms and systems on-site.

Range may include but is not limited to – computer system controls, communications, re-booting the system, alarm system.

Outcome 2

Describe the emergency shutdown systems at a sand extractives site.

Performance criteria

2.1 The emergency shutdown procedures are described in relation to mining plant and equipment on-site.

Range may include but is not limited to – bucket wheel excavators, dredges, belt wagons, hopper/cable reel cars, moveable conveyors, main conveyors, stackers, mining ancillary equipment.

2.2 The emergency shutdown procedures are described in relation to processing plant and equipment on-site and industry best practice.

Range may include but is not limited to – primary feed systems, magnetic

separators, gravity separation systems, scrubbers, cyclones, recyclable water systems, tailings disposal, screening systems.

2.3 The emergency shutdown procedures are described in relation to slurry pumping plant and equipment on-site and slurry pumping operation.

Range may include but is not limited to – tailings lines and pumps, slurry

pumping systems and pumps, cyclones.

- 2.4 The emergency shutdown for stockpiles is described in relation to feeders, stackers, re-claim, and operating on stockpiles.
- 2.5 The emergency shutdown procedures for control rooms and control systems on-site are described in relation to computer system controls and communications.

Outcome 3

Describe the documentation required in the event of an emergency shutdown at a sand extractives site.

Performance criteria

3.1 The emergency shutdown documentation that must be completed and reported is described in accordance with industry best practice.

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	31 July 2001	31 December 2019
Review	2	23 September 2005	31 December 2019
Review	3	21 August 2009	N/A
Rollover and Revision	4	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.

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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.