Title	Demonstrate knowledge of and operate a coal processing plant		
Level	3	Credits	10

Purpose		People credited with this unit standard are able to: demonstrate knowledge of theory and equipment used in coal processing; operate a coal processing plant; and supervise stockpiling and loadout of coal products.		
Classification		Extractive Industries > Surface Extraction		
Available grade		Achieved		
Prerequisites		Unit 19737, Demonstrate basic knowledge of coal quality assurance; or demonstrate equivalent knowledge and skills.		

#### **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 (Mining Operations and Quarrying Operations) Regulations 2016;

Introduction to the Health and Safety at Work Act 2015, 1st Ed (Wellington: WorkSafe New Zealand, 2016) available at <a href="http://www.worksafe.govt.nz/worksafe/information-guidance/legal-framework/introduction-to-the-hsw-act-2015/special-guide">http://www.worksafe.govt.nz/worksafe/information-guidance/legal-framework/introduction-to-the-hsw-act-2015/special-guide</a>; industry best practice for coal processing.

#### 2 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, managers' rules, occupational health and safety policy, industry guidelines, codes of practice, manufacturers' instructions, site requirements, safe working and/or job procedures (or equivalent).

# Outcomes and performance criteria

#### **Outcome 1**

Demonstrate knowledge of theory and equipment used in coal processing.

#### Performance criteria

1.1 Separation of coal by rotary breaker is explained in accordance with industry best practice.

1.2 Gravity separation theory is explained in terms of its application to coal processing.

1.3 Gravity separation equipment is described in terms of its application to coal processing.

Range may include but is not limited to – boil boxes, riffles, hydro lift, jigs,

spirals, cyclones, heavy medium baths, heavy medium cyclones.

1.4 Ancillary equipment is described in terms of its application to coal processing.

Range may include but is not limited to – crushers, screens, conveyors,

pumps, on-line analysers.

### Outcome 2

Operate a coal processing plant.

## Performance criteria

- 2.1 Pre-start checks are performed in accordance with industry best practice and manufacturer's instructions.
- 2.2 Plant is operated in accordance with industry best practice and manufacturer's instructions.

Range plant includes either – rotary breaker, hydrolift;

or jig;

or heavy medium cyclone.

2.3 Shutdown procedures are performed in accordance with industry best practice and manufacturer's instructions.

### **Outcome 3**

Supervise stockpiling and loadout of coal products.

#### Performance criteria

- 3.1 Product stockpiling is supervised in accordance with industry best practice.
- 3.2 Loadout of products is supervised in accordance with industry best practice.

Range trucks; rail wagons.

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	24 February 2003	31 December 2019
Review	2	23 April 2007	N/A
Rollover and Revision	3	25 January 2018	N/A

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

## Comments on this unit standard

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