Title	**Maintain analytical monitoring equipment**		
Level	**4**	**Credits**	**4**

Purpose	People credited with this unit standard are able to: – calibrate analytical exhaust monitoring equipment; and – service analytical exhaust monitoring equipment.

Classification	Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

Available grade	Achieved

Guidance Information

1 This unit standard has been developed for learning and assessment in the workplace.

2 References
ANSI/ISA-51.1-1979 (R1993) *Process Instrumentation Terminology;*
Electricity Act 1992;
Electricity (Safety) Regulations 2010;
Health and Safety at Work Act 2015 and
Associated regulations;
ISSN 0114-0663, *New Zealand Electrical Codes of Practice*, available from Worksafe, https://worksafe.govt.nz/;
and all subsequent amendments and replacements.

3 Definitions
Industry requirements – includes all asset owner requirements, manufacturers' specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, business requirements; and quality management requirements relevant to the workplace in which the assessment is carried out.
PPE – Personal Protection Equipment that is appropriate to any job being undertaken and can include overalls, safety glasses, gloves, face masks, safety boots, ear muffs etc.
Service – planned activity during normal operation, that involves, inspection, cleaning, testing, adjusting or making minor repairs to a piece of equipment to ensure that it works properly.

4 Recommended skills and knowledge: Unit 28081, *Demonstrate knowledge of gas analytical measurement and flame, gas, smoke, and heat detection*.

Outcomes and performance criteria

Outcome 1

Calibrate analytical exhaust monitoring equipment.

Performance criteria

1.1 Explain and follow safe work procedures.

Range may include but is not limited to – isolation, low oxygen, high temperature, toxic gas conditions, PPE.

1.2 Select test equipment according to required accuracy and range of devices.

Range sample gases, collecting samples, portable analyser; evidence of one required.

1.3 Identify and explain types and causes of typical errors.

Range sensor damage, gas sample; evidence of one required.

1.4 Calibrate equipment by making appropriate adjustments, to a specified accuracy.

Range zero, span.

1.5 Produce calibration reports in accordance with industry requirements.

Outcome 2

Service analytical exhaust monitoring equipment.

Performance criteria

2.1 Locate, interpret, and apply technical information for servicing equipment.

2.2 Explain and follow safe work procedures.

Range may include but is not limited to – isolation, low oxygen, high temperature, toxic gas conditions, PPE.

2.3 Service and verify performance of an analytical exhaust monitoring system to ensure continued operation.

Range may include but is not limited to – tools, materials, parts, techniques, specifications.

2.4 Produce service reports in accordance with industry requirements.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	31 October 1995	31 December 2013
Revision	2	30 October 1997	31 December 2013
Revision	3	3 April 2001	31 December 2013
Review	4	22 June 2001	31 December 2013
Review	5	19 May 2008	31 December 2019
Review	6	21 November 2013	31 December 2027
Rollover and Revision	7	28 June 2018	31 December 2027
Review	8	30 January 2025	31 December 2027

Consent and Moderation Requirements (CMR) reference	0003

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.