

<b>Title</b>	<b>Explain environmental management of air discharges in a primary products food processing operation</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This theory-based unit standard is for specialist technicians who are responsible for working with environmental systems, in a primary products food processing operation.</p> <p>People credited with this unit standard are able to explain: potential sources of contaminants in air discharges; systems used to monitor contaminants in air discharges; use of computer modelling to predict the effect of air discharges on ambient air quality; use of measures to reduce the effects of air discharges on ambient air quality; and effects of legislation on air discharges and climate change, in a primary products food processing operation.</p>
----------------	--

<b>Classification</b>	Primary Products Food Processing > Primary Products Food Processing - Operational Skills
-----------------------	--

<b>Available grade</b>	Achieved
------------------------	----------

---

**Explanatory notes**

- 1 Legislation relevant to this unit standard includes but is not limited to – Health and Safety in Employment Act 1992, Health and Safety in Employment Regulations 1995, Resource Management Act 1991, and Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (SR 2004/309, SR 2004/433, SR 2005/214, SR 2008/375).
  - 2 Definition  
*Primary products food processing operation* – covers a meat processing, dairy processing, seafood or bakers yeast manufacturing operation.
- 

**Outcomes and evidence requirements**

**Outcome 1**

Explain potential sources of contaminants in air discharges from a primary products food processing operation.

**Evidence requirements**

1.1 Effects of fuel sources on particulates and gas contaminants are explained in terms of air discharges.

Range fuel sources include but are not limited to – natural gas, coal, biofuels.

**Outcome 2**

Explain systems used to monitor contaminants in air discharges from a primary products food processing operation.

**Evidence requirements**

2.1 Methodologies used to monitor air discharges are explained in terms of applications and limitations.

Range methodologies include but are not limited to – inline measurement, periodic measurement.

2.2 Methodologies used to monitor ambient air quality in the vicinity of food processing plants is explained in terms of applications and limitations.

**Outcome 3**

Explain use of computer modelling to predict the effect of air discharges on ambient air quality from a primary products food processing operation.

**Evidence requirements**

3.1 Use of computer modelling as a tool for preparing an environmental effects assessment.

3.2 Effects of climate, terrain, and discharge characteristics are explained in terms of the accuracy of computer modelling.

3.3 Methodologies used to measure meteorological conditions and terrain are explained in terms of their use for computer modelling.

**Outcome 4**

Explain use of measures to reduce the effects of air discharges on ambient air quality in a primary products food processing operation.

**Evidence requirements**

4.1 Measures used to reduce levels of contaminants from air discharges are explained in terms of their effectiveness.

Range measures include but are not limited to – bag filters, electrostatic precipitation, wet-scrubbers, cyclones.

- 4.2 Effects of air discharge on ambient air quality are explained in terms of location and height.
- 4.3 Selection and setting of fuel specifications is explained in terms of reducing contaminants in air discharges.
- Range contaminants include but are not limited to – sulphur, particulates.

## Outcome 5

Explain effects of legislation requirements on air discharge and climate change.

### Evidence requirements

- 5.1 Effects of carbon dioxide emissions on climate change are explained.
- 5.2 Effects of Resource Management Regulations for particulates and sulphur dioxide are explained in terms of granting resource consents.
- 5.3 Monitoring of air discharges for compliance with resource consent conditions is explained in terms of legislative requirements.

<b>Replacement information</b>	This unit standard replaced unit standard 25674.
--------------------------------	--

<b>Planned review date</b>	31 December 2020
----------------------------	------------------

### Last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 September 2015	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0033
--	------

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

### Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

---

**Comments on this unit standard**

Please contact the Primary Industry Training Organisation [standards@primaryito.ac.nz](mailto:standards@primaryito.ac.nz) if you wish to suggest changes to the content of this unit standard.