<table>
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<tr>
<th>Title</th>
<th>Demonstrate knowledge of the regulatory programme assuring safety of commercial bivalve shellfish at harvesting</th>
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<tbody>
<tr>
<td>Level</td>
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<td>Credits</td>
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**Purpose**

This unit standard is for people working in a seafood operation. People credited with this unit standard are able to demonstrate knowledge of: bivalve shellfish contaminants; the types of methods for monitoring potential contaminants of bivalve shellfish in the growing area; and the role of components of the regulatory programme used to assure safety of commercial bivalve shellfish at harvesting.

**Classification**

Seafood > Aquaculture

**Available grade**

Achieved

**Guidance Information**

1. All evidence presented in this unit standard must be in accordance with:
   - Animal Products Act 1999;
   - Food Act 2014;
   - Health and Safety at Work Act 2015;
   and any subsequent amendments.

2. Definitions

   *Acceptability of areas for commercial bivalve shellfish harvesting* relates to the levels and persistence of contaminants present, for example, unsuitable to ever harvest; suitable to harvest when contaminant levels are not a risk to the health of the shellfish consumer.

   *Accumulation of contaminants* - the introduction of contaminants into bivalve molluscan shellfish that are harvested commercially in the New Zealand seafood industry.

   *Cleansing* - the self-cleansing process that live contaminated bivalve shellfish go through when they are put into clean seawater.

   *Types of contaminants* include but are not limited to – marine biotoxins, heavy metals, bacteria and viruses that affect bivalve shellfish growing areas and that have the potential to cause a risk to the health of the shellfish consumer.

   *Regulatory programme* - the Ministry for Primary Industries management and monitoring programmes that provides assurance that bivalve molluscan shellfish are safe to eat at the time of harvest.
Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of bivalve shellfish contaminants.

Performance criteria

1.1 Describe the types of contaminants that may harm the health of a human consumer.

Range evidence of two examples for each of four types of contaminants is required.

1.2 Describe the potential sources of each type of contaminant.

Range evidence of one example for each type of contaminant is required.

1.3 Describe the accumulation of each type of contaminant in bivalve shellfish.

1.4 Describe the range of times for cleansing of each type of contaminant.

1.5 Describe the impact of contaminant presence on commercial bivalve shellfish harvesting.

Range acceptability of areas for commercial bivalve shellfish harvesting, timing of the harvesting process.

Outcome 2

Demonstrate knowledge of the types of methods for monitoring potential contaminants of bivalve shellfish in the growing area.

Range types of methods – direct testing, use of indicator organisms, use of environmental indicators.

Performance criteria

2.1 Describe each type of method used for monitoring potential contaminants in bivalve shellfish.

2.2 Describe an advantage and a limitation for each type of method used for monitoring potential contaminants in bivalve shellfish.

Outcome 3

Demonstrate knowledge of the role of components of the regulatory programme used to assure safety of commercial bivalve shellfish at harvesting.
Performance criteria

3.1 Describe the role of the major components of the regulatory programme.

Range major components include but are not limited to – sanitary surveys, ongoing monitoring in growing areas, growing area management plans, local area marine biotoxin monitoring plans.

| Planned review date | 31 December 2023 |

Status information and last date for assessment for superseded versions

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Consent and Moderation Requirements (CMR) reference 0123
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

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