Describe practices to maintain the quality of perishable products during transport by road

Level 3
Credits 5

Purpose
This unit standard is for those who drive, or intend to drive, road transport vehicles transporting perishable products. It will be useful to other people whose work involves maintaining the cold chain during the distribution of perishable products.

People credited with this unit standard are able to describe: the hazards that can adversely affect the quality of perishable products during road transport; the sanitation practices required by own organisation’s risk-based food safety programme to isolate any spread of infection during road transport; good practices to maintain the quality of perishable products during road transport; preventative practices to mitigate risk to or loss of products during road transport; and procedures for disposal of contaminated products.

Subfield
Commercial Road Transport

Domain
Transportation of Perishable Products by Road

Status
Registered

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27 July 2005

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Open.

Accreditation
Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB)
NZ Motor Industry Training Organisation (Incorporated)

Accreditation and Moderation Action Plan (AMAP) reference
0092

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

Special notes

1 References
Information is available from the New Zealand Food Safety Authority website at http://www.nzfsa.govt.nz.
2 Definitions

The **cold chain** is a series of interdependent operations engaged in manufacturing, transporting, storing, servicing, and retailing temperature-sensitive food products. **Cross-docking** refers to movement of goods from vehicle to vehicle, vehicle to loading dock, loading dock to vehicle, undertaken at an intermediate stage during transport to facilitate the delivery operation. **Hazard** refers to any incident or situation, whether physical or environmental, that is likely to spoil the marketability of the perishable products. **Loading environment** refers to both loading and unloading activities. **Organisational requirements** include any legal requirements, standards, codes of practice, organisational and/or site policies and procedures, industry best practice, and manufacturers’ instructions. These must be available to candidates, providers, and assessors. A **pathogen** is an organism, such as a bacteria, virus, or fungus, which causes or may cause disease. **Perishable products** refers to products for human consumption that are time-, temperature-, handling- and/or regulatory-sensitive such as meat, seafood, baked goods, confectionery, dairy products, breads, fruit and vegetables. **Risk-based food safety programmes** are food product safety programmes based on a Hazard Analysis and Critical Control Point (HACCP) system to mitigate risk to food products.

3 The legal requirements relevant to this unit standard include:

- Animal Products Act 1999;
- Biosecurity Act 1993;
- Food Act 1981.

4 Any new, amended, or replacement Acts, regulations, Rules, standards, codes of practice, New Zealand Food Safety Authority or NZ Transport Agency requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

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**Elements and performance criteria**

**Element 1**

Describe the hazards that can adversely affect the quality of perishable products during road transport.

**Performance criteria**

1.1 The description includes the physical hazards to be considered during transport of perishable products.

  Range physical hazards include but are not limited to – incorrect handling, light exposure, glass, metal, soil, gravel, sharp objects.
1.2 The description includes the chemical hazards that affect perishable products during transport.

Range chemical hazards include but are not limited to – oil, diesel, exhaust fumes and gases, fertilisers, industrial chemicals, preservative solutions, odour transfer.

1.3 The description includes the microbial hazards that affect perishable products during transport.

Range microbial hazards include – bacteria, fungi, viruses, odour transfer.

1.4 The description includes the biological hazards that affect perishable products during transport.

Range biological hazards include but are not limited to – animal faeces, human, bird, insect, rodent.

Element 2

Describe the sanitation practices required by own organisation’s risk-based food safety programme to isolate any spread of infection during road transport.

Performance criteria

2.1 The description includes procedures for maintaining personal hygiene standards and preventing contamination of perishable products.

Range includes but is not limited to – personal cleanliness, open wounds, festering sores, cleanliness of clothing.

2.2 The description includes procedures for maintaining vehicle hygiene.

Range includes but is not limited to – frequency of cleaning, water quality, use of disinfectants, overall vehicle and refrigeration unit maintenance, doors and seals, truck decking.

2.3 The description includes procedures for maintaining the hygiene of the loading environment.

Range loading environment includes but is not limited to – pallets, boxes, bins, non-food surfaces.
Element 3

Describe good practices to maintain the quality of perishable products during road transport.

Performance criteria

3.1 The description includes driver checks required before loading perishable products.

Range includes but is not limited to – pre-trip check, pre-loaded vehicle check, documentation check, load plan.

3.2 The description includes reasons for using product temperature as a quality control point.

Range retaining product quality, preventing microbial growth, maintaining shelf life, mitigating risk to or loss of product.

3.3 The description includes required driver response when suspected substandard product is loaded at the point of pick-up.

3.4 The description includes the effects of time and/or temperature on the quality of perishable products during transport.

Range pathogen growth, rate of deterioration, delivery sequence, product quality.

Element 4

Describe preventative practices to mitigate risk to or loss of products during road transport.

Performance criteria

4.1 The description includes the minimum industry recommended standards for the transportation of perishable products.

Range pick-up, line haul, delivery, cross-docking.

4.2 The description includes the requirements of a risk-based food safety programme for segregation of products, odour transfer, temperature control and product handling.

Element 5

Describe procedures for disposal of contaminated products.

Performance criteria

5.1 The description includes procedures for disposal of contaminated perishable products in accordance with legal and organisational requirements.
Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP 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 NZ Motor Industry Training Organisation (Incorporated) info@mito.org.nz if you wish to suggest changes to the content of this unit standard.