
GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 1155

24 November 2006



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Transport and Logistics Operations

registered by NSB 11, Services, publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, subfields, NQF levels, credits, and purpose of the qualification and unit standards. The qualification and unit standards can be accessed via the SAQA web-site at www.saga.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield.

Comment on the qualifications and unit standards should reach SAQA at the address ***below and no later than 23 December***. All correspondence should be marked **Standards Setting – SGB for Transport and Logistics Operations** and addressed to

The Director: Standards Setting and Development
SAQA

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S BHIKHA

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SAQA QUAL ID		QUALIFICATION TITLE	
57849		Further Education and Training Certificate: Dangerous Goods: Multi-modal Transportation	
Operations			
QUAL TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD
Further Ed and Training Cert		Services	Transport, Operations and Logistics
ABET BAND	MINIMUM CREDITS	NQF LEVEL	(QUALIFICATION CLASS
	128	Level 4]Regular-Unit Stds Based

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

The carrying of dangerous goods by Multi-modes involves the risk of accidents and incidents, such as spillage of the goods, leading to hazards such as fire, explosion, chemical burn or environmental damage. Therefore this Qualification will contribute to increasing levels of safety, efficiency and effectiveness and will develop a common integrated and co-ordinated approach to the handling and transportation of dangerous goods. The thrust of this Qualification focuses on the regulations, duties and responsibilities which will enable learners to discharge their duties safely. Learners will also become competent with regard to the security of their loads.

A person acquiring this Qualification will obtain the necessary applied competence to provide a top class service pertaining to the handling and transportation of dangerous goods, applying risk management principles and monitoring compliance in the handling and transportation of dangerous goods, and to give advice to management. Learners can specialise on the classification system, marking, labelling, packaging, loading/off loading, storage and transportation of dangerous goods.

The Qualification aims at developing a competent and professional work force to handle and transport dangerous goods.

Rationale:

This Qualification could provide learners with access to employment opportunities within the broader transport sector. The transportation of dangerous goods is a vital responsibility, as those charged with the transportation are held responsible for the safekeeping of the goods and the protecting of the environment and people. Dangerous goods transportation has a major impact on both people and the environment in terms of incidents and accidents where they might be directly or indirectly involved. This Qualification will serve to promote the safe and successful transportation of dangerous goods by Multi-modes of transport (sea, road, air and rail). It develops the competencies required for the transportation of dangerous goods for the public, industry and the government.

This Qualification reflects the need of the community, government and employers for the learner to obtain the essential skills needed for further learning and to receive recognition for existing skills and knowledge. This Qualification aims to develop learners, promote professionalism, work ethics and good governance. It will allow clarification of the specific roles of the learners, the consignor, operator or consignee in the handling and transportation of dangerous goods. The level of flexibility within the range of electives will also allow the individual to pursue further career specialisation within the different modes of transportation (sea, road, air and rail). Learners will receive a formal Qualification in the handling and transportation of

dangerous goods where previously no formal recognition existed and training was done by short courses offered by a range of different providers of education and training. These courses were not always recognised as it was not against recognised standards.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMES TO BE IN PLACE

It is assumed that the learner accessing this Qualification is competent in:

- > Communication at NQF Level 3 or equivalent.
- > Mathematical Literacy at NQF Level 3 or equivalent.
- > Computer Literacy at NQF Level 2 or equivalent.

Recognition of prior learning

This Qualification may be achieved in part or completely through the recognition of prior learning, which includes formal, informal and non-formal learning and work experience and must adhere to the policies and procedures specified by the relevant ETQA. The learner should be thoroughly briefed on the mechanism to be used and support and guidance should be provided. Care should be taken that the mechanism used provides the learner with an opportunity to demonstrate competence and is not so onerous as to prevent learners from taking up the Recognition of Prior Learning option towards gaining a Qualification.

Access to the Qualification

Access to this Qualification is open bearing in mind the Learning Assumed to be in place.

QUALIFICATION RULES

The Qualification is made up of a combination of learning outcomes from Fundamental, Core and Elective components, totaling 128 credits.

Fundamental

- > There are 56 credits allocated for the Fundamental Unit Standards which are all compulsory.

Core

- > 51 credits have been allocated to the Core Unit Standards. This is to ensure that the Qualification has a strong focus on dangerous goods transportation. The Core Unit Standards offer a broad contextual understanding and will enable the learners to gain an all-round picture of the Dangerous Goods Transportation Industry. All the Core Unit Standards are compulsory.

Electives

- > A minimum of 21 credits must be selected by the learner from the 80 credits available in the 'Elective Component'. Learners should however, attempt to cluster the unit standards according to the modes of transportation in which they operate, although this is not essential.

EXIT LEVEL OUTCOMES

The Outcomes are specified in terms of a combination of Specific and Critical Cross-Field Outcomes as defined in the different unit standards. On achieving this Qualification, a learner is able to:

1. Ensure a safe and healthy workplace environment pertaining to the handling and transportation of dangerous goods by various modes of transport.
2. Apply risk management principles pertaining to the handling and transportation of dangerous goods.
3. Monitor practices and procedures relating to the handling and transportation of dangerous goods.
4. Explain and apply the safe loading and transporting of dangerous goods using a particular mode of transport.

ASSOCIATED ASSESSMENT CRITERIA

1.

- > Hazards in the workplace are identified, evaluated and controlled according to the relevant Health and Safety legislation and conventions.
- > Relevant legislation and regulations relating to occupational health and safety in the workplace are identified, explained and described as well as the role and responsibilities of the safety representative.
- > Health and Safety record keeping criteria as required by the relevant legislation and conventions are

understood and applied according to the stated legislation.

> Health and Safety obligations as required by managers are explained, described and adhered to in terms of communication and training.

2.

> Risk management processes are applied as a monitoring process in the handling and transportation of dangerous goods.

> Risk is managed and controlled in accordance with organisational standards and procedures.

3.

> Knowledge of underlying legislation, regulations and codes of practices relating to the handling and transportation of dangerous goods in a specific contexts are understood and applied.

> Different categories of dangerous goods, their hazards and effects are explained and described.

> Incidents are managed and controlled in accordance with incident management plan.

4.

> Methods and procedures for handling loading dangerous goods on to a particular mode of transport are explained according to safety and legislative requirements.

> A plan to stow, segregate, handle and deal with dangerous goods in various mode of transport *is* planned in accordance with organisational and legislative requirements.

> Accidents and spills are dealt with according to safety and legislative and organisational requirements.

Integrated assessment

Integrated assessment must evaluate the quality of observable performance as well **as** the thinking behind the performance. Some assessment aspects will demand practical demonstration on site, while others may not. In some cases inference will be necessary to determine competence depending on the nature and context within which performance takes place.

The assessor will collect evidence of the learner's competence by:

> Observing the learner on site.

> Asking questions and initiating short discussions to test understanding.

> Looking at records and reports.

Since this is a foundational Qualification, it is necessary to ensure that the fundamental part of the Qualification is also targeted to ensure that while the competence may have been achieved in a particular context, learners are able to apply it in a range of other contexts and for further learning. The assessment should **also** ensure that the critical cross-field outcomes have been achieved.

INTERNATIONAL COMPARABILITY

South Africa has a world class and highly sophisticated transport system and statistics indicated that 85% of goods carried by the various modes of transport are dangerous goods. In selecting countries for international comparison it is important to consider countries where the economic context in which the Qualification is to be used is similar to the South African context. Ideally, this Qualification should be compared to Qualifications from a country with a developed economy and a second developing country with an emerging economy in order to include contexts that have similarities to the South African situation.

Learners who work in the Air and Marine disciplines are far more regulated than that of road and rail. International Codes have been developed to regulate the transportation of Dangerous Goods by Air and by Sea and these were taken into account in both the learning and comparability.

- > Algeria.
- > Argentina.
- > Australia.
- > Bahamas.
- > Belgium.
- > Cuba.
- > Cyprus.
- > Czech Republic.
- > Denmark.
- > Ecuador.
- > Estonia.
- > Finland.
- > France.

- > Gambia.
- > Germany.
- > Greece.
- > Iceland.
- > India.
- > Indonesia.
- > Iran.
- > Ireland.
- > Israel.
- > Italy.
- > Jamaica.
- > Japan.
- > Latvia.
- > Liberia.
- > Malaysia.
- > Marshall Islands.
- > Mexico.
- > Morocco.
- > Netherlands.
- > New Zealand.
- > Norway.
- > Pakistan.
- > Panama.
- > Papua New Guinea.
- > Peru.
- > Philippines.
- > Poland.
- > Portugal.
- > Republic of Korea.
- > Russian Federation.
- > Saudi Arabia.
- > Singapore.
- > Slovenia.
- > Spain.
- > Sweden.
- > Switzerland.
- > Thailand.
- > Uruguay.
- > Vanuatu.
- > Hong Kong.
- > Tunisia.
- > United States.
- > United Kingdom.
- > American Samoa.

The countries listed above need to train the following according to the different international codes that relates to the function-specific training for the transportation of Dangerous Goods:

- > IMDG Code (Marine): Classification system, ICAO Code (Air): General philosophy.
- > IMDG Code (Marine): Pack in packages, ICAO Code (Air): Limitations.
- > IMDG Code (Marine): Mark, label and placard, ICAO Code (Air): General requirements for shippers.
- > IMDG Code (Marine): Pack/unpack cargo transport units, ICAO Code (Air): Classification.
- > IMDG Code (Marine): Prepare transport documentation, ICAO Code (Air): **List of** dangerous goods.
- > IMDG Code (Marine): Offer for transport, ICAO Code (Air): General packaging requirements.
- > IMDG Code (Marine): Accept for transport, ICAO Code (Air): Packing instructions.
- > IMDG Code (Marine): Handle in transport, ICAO Code (Air): Labelling and marking.
- > IMDG Code (Marine): Prepare loading/stowage plans, ICAO Code (Air): Shipper's declaration and other relevant documentation.
- > IMDG Code (Marine): Load/unload from ships, ICAO Code (Air): Acceptance procedures.
- > IMDG Code (Marine): Carry, ICAO Code (Air): Recognition of undeclared dangerous goods.
- > IMDG Code (Marine): Emergency procedures, ICAO Code (Air): Storage and loading procedures, Pilots' notification, Provisions for passengers and crew, Emergency procedures.

The unit standards in this qualification deal with all the above competencies and are in line with the International Codes for Air and Sea.

The following websites displayed various reports on 'Freeway Traffic Management', but no "Qualification" could be identified to make a direct comparison with. The reports deal with issues of improved safety, optimisation of real capacity of highways and better service delivery to motorists. It also deals with highway maintenance procedures dealing with hazardous material incidents.

- > Transport Research Board: www.trb.org.
- > International codes on transportation of hazardous material and goods: <http://hazmat.dot.gov>.
- > Ministry of Transportation: Ontario: www.tc.gc.ca.

An attempt was made to do a comparison with a country with an emerging economy. There are no recognised "standards" for training in the handling and transportation of dangerous goods. South African based training institutions, offers training in the conveyance of dangerous goods in Nigeria, Zimbabwe and Botswana. The training material is based on the South African unit standard "Convey Dangerous Goods by Road."

Training material for the training of Dangerous Goods Safety Advisors was obtained from Belgium. The training was once again based on their international codes and regulations. A Dangerous Goods Safety Advisor in the European Union needs to do the following:

- > Monitor for compliance with the rules governing the transportation of dangerous goods.
- > Advise on the transport of dangerous goods.
- > Prepare annual training reports to the management of the company and/or local public authority, on the undertakings activities in the transportation of dangerous goods.

The duties also include monitoring the following practices and procedures relating to the relevant activities of the undertaking:

- > The procedures for compliance with the rules governing the identification of dangerous goods being transported.
- > The undertakings practice in taking account when purchasing means of transport of any special requirements in connection with the dangerous goods being transported.
- > The procedures for checking the equipment used in connection with the transport, loading or unloading of dangerous goods.
- > The proper training of the undertakings employees and the maintenance or records of such training.
- > The implementation of proper emergency procedures in the event of any accident or incident that may affect safety during the transport, loading or unloading of dangerous goods.
- > Investigating and where appropriate, preparing reports on serious accidents, incidents or serious infringements recorded during the transport, loading or unloading of dangerous goods.
- > The implementation of appropriate measures to avoid the recurrence of accidents, incidents or serious infringements.
- > Verification that employees involved in the transport, loading, or unloading of dangerous goods have detailed operational procedures and instructions.
- > The implementation of verification procedures to ensure the presence on board the means of transport of the documents and safety equipment which must accompany transport and the compliance of such documents and equipment with the regulations.
- > The implementation of verification procedures to ensure compliance with the rules governing loading and unloading.

The training material deals with the following:

- > Regulations regulating the transportation of dangerous goods.
- > Exemptions.
- > Appointment of safety advisors, their roles and functions.
- > Reports to management.
- > Principles of UN classifications system.
- > Hazards of each class.
- > Identification of hazards.
- > Marking, labelling and placarding.
- > Road operations in relation to the transportation of dangerous goods.
- > The nine hazard classes and their sub-divisions.
- > Checklists.
- > Storage/stowage of dangerous goods.
- > Annual audits.

During the development of this Qualification, representatives from Belgium participated in this project to share their expertise and their best practice.

Based on the above exercise this Qualification compares well with the training courses and international codes found. The only noticeable difference is the emphasis that the international courses give to understanding the 'codes and regulations' and learners obtaining this Qualification are likely to receive international recognition as these qualifications are linked to International Standards and best practice.

ARTICULATION OPTIONS

The Qualification has been designed and structured so that qualifying learners can move from one context to another. Employers or institutions should be able to evaluate the outcomes of this Qualification against the needs of their context and structure top-up learning appropriately.

This Qualification has articulation possibilities with the following Qualifications:

Horizontal articulation possibilities lie with other NQF Level 3 Qualifications and Unit Standards in the learning areas of:

- > National Certificate: Customs Clearing: NQF Level 4: ID: **22441**.
- > National Certificate: Freight Forwarding: NQF Level 4: ID: **22443**.
- > Further Education and Training Certificate: Road Transport Management in the Public Sector: NQF Level 4: ID: **49489**.
- > Further Education and Training Certificate: Road Transport Supervision: NQF Level 4: ID: **48439**.

Vertical progression can be achieved by embarking on the study of related NQF Level 4 Qualifications:

- > National Diploma: Freight Forwarding: NQF Level 5: ID: **22444**.
- > National Certificate: Incident Management: NQF Level 5: ID: **49398**.
- > National Diploma: Freight Handling Logistics: NQF Level 5: ID: **14590**.

MODERATION OPTIONS

- > Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant ETQA.
- > Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.
- > Assessment and moderation of assessment will be overseen by the relevant ETQA according to the ETQA's policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQAs (including professional bodies); and in terms of the moderation guideline detailed immediately below.
- > Moderation must include both internal and external moderation of assessments at exit points of the Qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, exit level outcomes as well as the integrated competence described in the Qualification.

Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA.

Formative assessment

The assessment criteria for formative assessment are described in the various unit standards. Formative assessment takes place during the process of learning and assessors should use a range of assessment methods and tools that support each other to assess total competence. These tools may include but are not limited to the following:

- > In-situ (on-the-job) observations.
- > Role-play simulations.
- > Structured group discussions.
- > Knowledge tests, exams, case studies, projects, registers, logbooks, workbooks.
- > Verbal report backs (presentations).
- > Portfolios of evidence.
- > Projects.
- > Experiential learning.
- > Working in teams.
- > Scenario sketching.

The assessment method and or tools used by the assessor must conform to the following criteria:

- > It must be fair in a sense that it does not hinder or advantage the learner.
- > It must be valid in a sense that it measures what it intends to measure.
- > It must be reliable in a sense that it is consistent and delivers the same output across a range of learners.
- > It must be practical in a sense that it takes into account the available financial resources, facilities, equipment and time.

Summative assessment

Summative assessment is carried out at the end of the learning programme to assess the acquired competencies of the learner. A detailed portfolio of evidence may be required to prove the practical, applied and foundational competencies of the learner.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

The following criteria should be applied by the relevant ETQA:

- > Relevant Qualification at NQF Level 5 or higher.
- > Minimum of 2 years' experience. The subject matter experience of the assessor can be established by recognition of prior learning.
- > Registration as an assessor with the relevant ETQA.

NOTES

N/A

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
core	113852 Apply occupational health, safety and environmental principles	Level 3	10	Registered
core	13224 Monitor the application of safety, health and environmental protection procedures	Level 4	4	Registered
core	242657 Apply general management principles to the risk management function	Level 4	3	Recommended
core	242658 Demonstrate knowledge and application of the nature of risk and the risk management process	Level 4	4	Recommended
core	242665 Apply technical knowledge and skill in order to manage risk in occupational health and occupational hygiene	Level 4	8	Recommended
core	113851 Manage the transportation of dangerous goods	Level 5	6	Registered
core	115217 Deal with hazardous materials	Level 5	8	Registered
core	115223 Demonstrate awareness and take initial actions at a hazardous materials incident	Level 5	8	Registered
Elective	123259 Convey dangerous goods by road	Level 3	4	Registered
Elective	242994 Handle and load dangerous goods for transportation by air	Level 3	2	Draft - Prep for P Comment
Elective	11261 Facilitate the final release and delivery of goods imported and exported by Airfreight	Level 4	5	Reregistered
Elective	242668 Demonstrate knowledge and application of the Occupational Health and Safety Act, 85 of 1993 (OHSA) (as amended) and the responsibilities of management in terms of the Act	Level 4	4	Recommended
Elective	242985 Package dangerous goods for transportation	Level 4	4	Draft - Prep for P Comment
Elective	242986 Accept and process dangerous goods for transportation by air	Level 4	6	Draft - Prep for P Comment
Elective	242987 Identify, pack, mark and label dangerous goods for transportation by air	Level 4	2	Draft - Prep for P Comment
Elective	242989 Effect procedures for carrying dangerous, hazardous and harmful cargoes at sea	Level 4	2	Draft - Prep for P Comment
Elective	242990 Load/unload dangerous goods for transportation by road	Level 4	10	Draft - Prep for P Comment
Elective	242991 Facilitate the forwarding and clearing of dangerous goods for transportation	Level 4	4	Draft - Prep for P Comment
Elective	242995 Pack, stow and segregate dangerous, hazardous and harmful cargoes for marine transportation	Level 4	5	Draft - Prep for P Comment
Elective	242996 Handle dangerous goods during warehousing and storage	Level 4	4	Draft - Prep for P Comment
Elective	242997 Identify and classify dangerous goods for transportation	Level 4	4	Draft - Prep for P Comment

Elective	242998 Plan proposed stowage and segregation for the transportation of dangerous goods at sea	Level 4	3	Draft - Prep for P Comment
Elective	242999 Respond to and clean up a spill	Level 4	4	Draft - Prep for P Comment
Elective	11268 Generate solutions to legal problems encountered in the carriage by air of internationally traded goods	Level 5	5	Reregistered
Elective	242988 Inspect and approve packaged goods for compliance in the transport of dangerous, hazardous and harmful cargoes by sea	Level 5	2	Draft - Prep for P Comment
Elective	242992 Monitor for compliance in the transportation of dangerous goods in the Port Environment	Level 5	8	Draft - Prep for P Comment
Elective	242993 Organise the movement of dangerous, hazardous and harmful cargoes	Level 5	2	Draft - Prep for P Comment
Fundamental	119457 Interpret and use information from texts	Level 3	5	Registered
Fundamental	119465 Write/present/sign texts for a range of communicative contexts	Level 3	5	Registered
Fundamental	119467 Use language and communication in occupational learning programmes	Level 3	5	Registered
Fundamental	119472 Accommodate audience and context needs in oral signed communication	Level 3	5	Registered
Fundamental	7468 Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	6	Reregistered
Fundamental	9015 Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	Level 4	6	Reregistered
Fundamental	9016 Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	Level 4	4	Reregistered
Fundamental	12154 Apply comprehension skills to engage oral texts in a business environment	Level 4	5	Reregistered
Fundamental	119459 Write/present/sign for a wide range of contexts	Level 4	5	Registered
Fundamental	119462 Engage in sustained oral/signed communication and evaluate spoken/signed texts	Level 4	5	Registered
Fundamental	119469 Read/view, analyse and respond to a variety of texts	Level 4	5	Registered



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UNIT STANDARD:

1

Package dangerous goods for transportation

SAQA US ID		UNIT STANDARD TITLE	
242905		Package dangerous goods for transportation	
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 4	Regular

SPECIFIC OUTCOME 1

Identify and classify dangerous goods to be packed.

SPECIFIC OUTCOME 2

Assess packaging group of dangerous goods to be packed.

SPECIFIC OUTCOME 3

Obtain approval of packaging by competent/testing authority



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UNIT STANDARD:

2

SAQA US ID	UNIT STANDARD TITLE		
242986	Accept and process dangerous goods for transportation by air		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	6	Level 4	Regular

SPECIFIC OUTCOME 2

Identify and apply the limitations associated with the carriage of dangerous goods by air.

SPECIFIC OUTCOME 3

Verify the classification of dangerous goods when accepting and processing dangerous goods for transportation **by** air.

SPECIFIC OUTCOME 4

Compile and verify documentation.



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UNIT STANDARD:

3

Identify, pack, mark and label dangerous goods for transportation by air

SAQA US ID	UNIT STANDARD TITLE		
242987	Identify, pack, mark and label dangerous goods for transportation by air		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 4	Regular

SPECIFIC OUTCOME 1

Identify dangerous goods for transportation by air.

SPECIFIC OUTCOME 2

identify and apply packaging requirements for the transportation of dangerous goods by air.

SPECIFIC OUTCOME 3

identify and apply the marking and labelling of dangerous goods for transportation by air



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UNIT STANDARD:

4

Inspect and approve packaged goods for compliance in the transport of dangerous, hazardous and harmful cargoes by sea

SAQA US ID	UNIT STANDARD TITLE		
242988	Inspect and approve packaged goods for compliance in the transport of dangerous, hazardous and harmful cargoes by sea		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 5	Regular

SPECIFIC OUTCOME 1

Inspect container/magazine for suitability.

SPECIFIC OUTCOME 2

Verify documentation.

SPECIFIC OUTCOME 3

Check vessel for suitability and segregation.

SPECIFIC OUTCOME 4

Issue certificate of compliance.



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UNIT STANDARD:

5

Effect procedures for carrying dangerous, hazardous and harmful cargoes at sea

SAQA US ID	UNIT STANDARD TITLE		
242989	Effect procedures for carrying dangerous, hazardous and harmful cargoes at sea		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 4	Regular

SPECIFIC OUTCOME 1

Receive booking request for the transportation of dangerous, hazardous and harmful cargoes at sea.

SPECIFIC OUTCOME 2

Complete documentation.

SPECIFIC OUTCOME 3

Accept dangerous, hazardous and harmful cargoes in port,

SPECIFIC OUTCOME 4

Stow/segregate and secure dangerous, hazardous and harmful cargoes on vessel.



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UNIT STANDARD:

6

Load/unload dangerous goods for transportation by road

SAQA US ID	UNIT STANDARD TITLE		
242990	Load/unload dangerous goods for transportation by road		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	

SPECIFIC OUTCOME 1

Adhere to standard operating procedures and applicable requirements of South African National Standards 10231 for the loading/unloading of packaged goods and bulk.

SPECIFIC OUTCOME 2

Identify required danger warning diamond, warning placards, tremcards and dangerous goods declaration.

SPECIFIC OUTCOME 3

Comply with standard operating procedures and South African National Standards 10231 after loading/unloading of dangerous goods.

SPECIFIC OUTCOME 4

Comply with contents of operational arrangement.



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UNIT STANDARD:

7

SAQA US ID	UNIT STANDARD TITLE		
242991	Facilitate the forwarding and clearing of dangerous goods for transportation		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 4	Regular

SPECIFIC OUTCOME 1

Arrange and evaluate relevant documentation relating to the movement of dangerous goods for transportation.

SPECIFIC OUTCOME 2

Identify and classify dangerous goods.

SPECIFIC OUTCOME 3

Facilitate the transportation of dangerous goods.

SPECIFIC OUTCOME 4

Organise storage for dangerous goods.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

8

SAQA US ID		UNIT STANDARD TITLE	
242992		Monitor for compliance in the transportation of dangerous goods in the Port Environment	
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	8	Level 5	Regular

SPECIFIC OUTCOME 1

Receive applications from stakeholders to move Dangerous Goods within the Port Area

SPECIFIC OUTCOME 2

Verify the applications for the movement of Dangerous Goods.

SPECIFIC OUTCOME 3

Approve/reject applications from stakeholders.

SPECIFIC OUTCOME 4

Receive tanker information as "tanker arrival notice" to ensure compliance.

SPECIFIC OUTCOME 5

Apply control measures to ensure procedures for optimum safety.



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UNIT STANDARD:**9**

SAQA US ID		UNIT STANDARD TITLE	
242993		Organise the movement of dangerous, hazardous and harmful cargoes	
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 5	Regular

SPECIFIC OUTCOME 1

Arrange relevant documentation relating to the movement of dangerous, hazardous and harmful cargoes.

SPECIFIC OUTCOME 2

Organise the booking of storage for dangerous, hazardous and harmful cargoes.

SPECIFIC OUTCOME 3

Arrange the carriage of dangerous, hazardous and harmful cargoes according to the relevant classification and documentation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

10

Handle and load dangerous goods for transportation by air

SAQA US ID	UNIT STANDARD TITLE		
242994	Handle and load dangerous goods for transportation by air		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 3	Regular

SPECIFIC OUTCOME 1

Accept and store dangerous goods for transportation by air.

SPECIFIC OUTCOME 2

Load/off-load and secure dangerous goods for transportation by air.

SPECIFIC OUTCOME 3

Inspect dangerous goods for transportation by air.

SPECIFIC OUTCOME 4

Provide information to relevant role-players.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

11

SAQA US ID		UNIT STANDARD TITLE	
242995		Pack, stow and segregate dangerous, hazardous and harmful cargoes for marine transportation	
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Transport and Logistics Operations		11	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Services	Transport, Operations and Logistics
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 4	Regular

SPECIFIC OUTCOME 1

Explain and apply packaging and labelling requirements in terms of International Maritime Dangerous Goods Code (IMDG) requirements.

SPECIFIC OUTCOME 2

Stow dangerous, hazardous and harmful cargoes.

SPECIFIC OUTCOME 3

Segregate dangerous, hazardous and harmful cargoes.

SPECIFIC OUTCOME 4

Verify transport documentation for dangerous, hazardous and harmful cargoes.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

12

SAQA US ID	UNIT STANDARD TITLE		
242996	Handle dangerous goods during warehousing and storage		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 4	Regular

SPECIFIC OUTCOME 1

Identify and classify dangerous goods in accordance with documentation, packaging and labelling.

SPECIFIC OUTCOME 2

Handle and store classified goods and substances.

SPECIFIC OUTCOME 3

Prepare the dangerous goods for transportation.

SPECIFIC OUTCOME 4

Take appropriate actions in the event of accidents in the handling of dangerous goods.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

13

Identify and classify dangerous goods for transportation

SAQA US ID	UNIT STANDARD TITLE		
242997	Identify and classify dangerous goods for transportation		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 4	Regular

SPECIFIC OUTCOME 1

Receive sample of potential substance.

SPECIFIC OUTCOME 2

Facilitate the analysis and assessment of a sample based on United Nations criteria for classification and identification.

SPECIFIC OUTCOME 3

Facilitate the development of the material safety data sheet (**MSDS**) and transport documentation relevant to the substance.

SPECIFIC OUTCOME 4

Identify and allocate packaging requirements according to substance if classified.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

14

Plan proposed stowage and segregation for the transportation of dangerous goods at sea

SAQA US ID	UNIT STANDARD TITLE		
242998	Plan proposed stowage and segregation for the transportation of dangerous goods at sea		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 4	Regular

SPECIFIC OUTCOME 1

Stow and segregated products in conformity with International Maritime Dangerous Goods code and vessel certificate of compliance for carriage of dangerous goods.

SPECIFIC OUTCOME 2

Interpret requirements to develop stowage plan.

SPECIFIC OUTCOME 3

Develop stowage plan.

SPECIFIC OUTCOME 4

Prepare for an emergency and contingency plan for carriage of dangerous, hazardous and harmful cargoes by sea.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

15

Respond to and clean up a spill

SAQA US ID	UNIT STANDARD TITLE		
242999	Respond to and clean up a spill		
SGB NAME	ORGANISING FIELD ID	PROVIDER NAME	
SGB Transport and Logistics Operations	11		
UNIT STANDARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Services	Transport, Operations and Logistics	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 4	Regular

SPECIFIC OUTCOME 1

Identify and assess the risk.

SPECIFIC OUTCOME 2

Confine a spill.

SPECIFIC OUTCOME 3

Evaluate the incident and implement clean up.

SPECIFIC OUTCOME 4

Complete required documentation and reports.