



# **Technical Guidance Material for Cargo Handling Organization/Cargo Operator/Shippers and Freight forwarders**

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Subject: **DANGEROUS GOODS TECHNICAL GUIDANCE MATERIAL FOR CARGO HANDLING ORGANISATION/ CARGO OPERATORS/SHIPPERS AND FREIGHT FORWARDERS**

Date: **15 MAY 2017**

## **APPLICABILITY**

This process applicable to Cargo handling organisations, Cargo Operators, Shippers and Freight Forwarders and is to be used in combination with the applicable checklists, Part 92 of the CAR 2011, as amended, the SA CATS and the ICAO Technical Instructions for the safe transport of Dangerous Goods by air.

## **PURPOSE**

The purpose of this user guide is to give guidance to Cargo handlers/Operators about the handling, loading and storage of Dangerous Goods. Nothing in this guidance material prohibits the user from adding any information in their manuals which they may deem pertinent for safe handling of Dangerous Goods.

## **REQUIREMENTS**

- a. Develop the procedural manual for the warehouse that contains Dangerous goods procedures.
- b. Ensure the Facility has an area designated for DG storage,
- c. Ensure there is Relevant signage:
- d. Develop a Cargo Procedures Manual that has the following appendices.
  - Appendix A- Record of Amendment
  - Appendix C – Emergency Response Chart
  - Appendix D – Segregation Table
  - Appendix E – DG Posters
- a. Developed Training Program for Cargo handling organisation / Cargo Operator Personnel
- b. Designated Dangerous Goods Personnel trained in CAT 6
- c. Ensure that the following is available in the facility:
  - Spill Kit / Fire extinguisher & First Aid Kit
  - Current IATA Dangerous Goods Regulations or DG User Guide Material

## SOURCES & REGULATIONS

### SOURCES

- a. South African Civil Aviation Regulations, 2011 as amended and associated Technical Standards

### OTHER ACTS & REGULATIONS

- a. Aviation Act No. 13 of 2009
- b. ICAO Annexure 18
- c. ICAO Document 9284
- d. IATA Dangerous Goods Regulations
- e. IAEA

## OBJECTIVES & DEFINITIONS

### 1.1 PROGRAMME OBJECTIVE

The main objective of this manual is to ensure that dangerous goods conveyed on a commercial aircraft are accepted, labeled, handled, stored, transported and conveyed on aircraft through the application of safety measures laid down in Part 92 of the South African Civil Aviation Regulations, as well as its associated Technical Standards (SA-CATS-92).

This programme is designed to meet the requirements of Aviation Safety related standards contained in ICAO Annex 18, and is in line with Part 92 of the CARs', the SA-CATS-92.

This programme has been prepared by the official responsible for the implementation and maintenance of safety, in consultation with all applicable operational role players, submitted to and signed and dated by Company Management. This programme will be reviewed and updated as and when necessary.

### 1.2 Scope

The provisions of this Dangerous Goods used by to:

- a. All personnel employed by Company Name (Pty) Ltd allocated with acceptance, processing and transportation of dangerous goods by road and air in all branches of Company name (Pty) Ltd;
- b. All contracted or third party service providers contracted to Company name (Pty)Ltd and handling dangerous goods or related documentation; and
- c. Any person seeking access to the dangerous goods designated areas of company name (Pty) Ltd cargo facilities.

### 1.3 DEFINITIONS

Where terms used in this programme are defined in the South African Civil Aviation Regulations, they are used in accordance with meanings and usage given therein. A wide variety of terms are used throughout the world to describe facilities, procedures and concepts for air operations and cargo warehouse operations. As far as possible the terms used in this document are those which have the widest international use.

- a. **Dangerous Goods** - are articles or substances which are capable of posing a risk to health, safety, property or the environment and are classified according to the IATA Dangerous Goods Regulations
- b. **Hidden Dangerous Goods** - are defined as cargo declared under a general description which may contain hazardous articles that are not apparent
- c. **Forbidden Dangerous Goods** - dangerous goods that are considered too dangerous to be carried on any aircraft under any circumstances
- d. **Forbidden Unless Exempted** - dangerous goods that are forbidden under normal circumstances but may be carried with specific approvals
- e. **Caro Aircraft Only** - dangerous goods that are considered to be too dangerous for carriage on passenger aircraft
- f. **Passenger & Cargo Aircraft** - dangerous goods to be carried on both passenger and Permissible cargo aircraft provided all the requirements of the Dangerous Goods Regulations are met and can be safely transported by air
- g. **Shipper** - the individual or company offering the consignment for shipment. They must fully comply with the DG Regulations when offering a consignment of dangerous goods
- h. **Operator** - a person, organization or enterprise engaged in, or offering to engage in a road and an aircraft operation

#### 1.4 ABBREVIATIONS

- a. ICAO – International Civil Aviation Organization
- b. IATA – International Air Transport Association
- c. IAEA – International Atomic Energy Agency
- d. UN – United Nations
- e. TPM – Training Procedures Manual
- f. MOP – Manual of Procedures

## 1. COMMITMENT STATEMENT

I declare that, To the best of my knowledge, the information contained in company name (Pty) Ltd Procedures Manual for Shippers, Freight Forwarders and Cargo Operators for Air Transport is true and accurate, the practices and procedures set out in this Manual will be implemented and maintained at all sites of Company name (Pty)Ltd

This Procedures Manual for Shippers, Freight Forwarders and Cargo Operators will be adjusted and adapted to comply with all future relevant changes to Part 92 of the South African Civil Aviation regulations, unless Company name (Pty)Ltd informs the South African Civil Aviation Authority that it no longer wishes to convey dangerous goods by air.

Company name (Pty) Ltd will inform the South African Civil Aviation Authority in writing of:

- a. minor changes / deviation to its Procedures Manual for Shippers, Freight Forwarders and Cargo Operators, promptly and at least within 10 working days; and
- b. major planned changes, such as new acceptance, labeling, handling, storage and segregation procedures and or major building works which might affect compliance with relevant Civil Aviation legislation or change of site/address, at least 15 working days prior to the commencement/the planned change,

In order to ensure compliance with relevant Civil Aviation legislation, company name (Pty) Ltd will cooperate fully with all inspections, as required, and provide access to all documents, as requested by authorized officers,

Company name (Pty)Ltd will inform the South African Civil Aviation Authority of any serious security breaches and of any suspicious circumstances which may be relevant to aviation security in particular any attempt to conceal prohibited articles in consignments,

Company name (Pty)Ltd will ensure that all relevant staff receive appropriate training and are aware of their security responsibilities under the company's Procedures Manual for Shippers, Freight Forwarders and Cargo Operators, and

Company name (Pty)Ltd will inform the South African Civil Aviation Authority if it ceases trading; it no longer deals with conveyance of dangerous goods; or it can no longer meet the requirements of the relevant Civil Aviation legislation.

I shall accept full responsibility for this declaration.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name surname, Managing Director

## 1. AMENDMENTS TO MANUAL

1.1 All amendments to an approved Cargo Procedures Manual for Shippers, Freight Forwarders and Cargo Operators shall be submitted to the SACAA for approval before being effected. The organisation will always operate in accordance with an approved Manual.

1.2 The Cargo manual may not be altered or amended without the written approval of the SACAA and of the person or position that undersigned the compliance undertaking as contained in the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators

1.3 Where a revision of this programme is effected, the following steps will be followed:

- A cover letter, indicating the amended pages and the number of amended pages.
- New pages will be issued for insertion into the programme identified by a revision number and date.
- Amendments will contain new information or revised meaning of text.
- The old pages must be destroyed in a secure manner not accessible to unauthorised persons and the Record of Amendment completed accordingly.
- Each recipient shall acknowledge receipt of updates and confirm implementation to the DG designated person within 48 hours after receipt.

Note: Each holder of a copy of the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators is responsible to verify that all pages listed on the covering letter have been received.

The control, amendment and distribution of the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators or any subsequent amendments will be done by the DG designated person.

The DG designated person shall be responsible for the distribution of copies of the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators, amendments thereof or any subsequent Emergency Amendments.

The DG designated person is responsible for making such amendments as well as making them available to relevant staff once approved by the SACAA.

The DG designated person shall maintain a register to account for all copies or parts of the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators distributed/issued and shall ensure the retrieval of any absolute manuals not returned by assigned persons.

## 2. ORGANISATIONAL STRUCTURE

### 2.1 Company Profile

Company name (Pty)Ltd (Head Quarters)  
100 James Avenue  
Bellville

Johannesburg  
1600

**Nature of business:**

- Courier
- Handling Organisation
- Freight Forwarder
- Consolidator
- Cargo Operators

**Cargo is received from the following sources:**

- Corporate Companies – Mainly Account Holders
- Manufacturers
- Freight forwarders
- Courier organizations
- Consolidators
- Air carriers
- Individual customers

**2.2 Physical Characteristics of Premises used for Receipt, Dispatch, Processing and Storage of Dangerous Goods**

Type(s) of Warehouse:

- leased and not shared with other companies

Address (es) of dangerous goods processing / storage area(s):

Location	Site Location	Address
Administration	Head Office	
Location Site 2	Bloemfontein	
Location Site 3	Cape Town	
Location Site 4	Durban	
Location Site 5	East London	

### 2.3 Organisational Structure

The organogram, depicting both the organizational structure as well as the security structure, depicting the relationship between the aviation security structure and safety structures within the organization. In particular the hierarchy and reporting lines of all structures that pertain to aviation safety are attached as per Appendix A

### 2.4 Designated Official

The person whose name appears below has been appointed by the organization as the Management Representative responsible for the implementation, monitoring and supervision of the aviation safety controls prescribed by Part 92 of the South African Civil Aviation Regulations.

Communication between the SACAA and Company name (Pty) Ltd should be directed to this official. This official is senior enough in the organization, as can be seen in Appendix A, to affect any directives which might be necessary in the interest of aviation security for dangerous goods.

He/She has the necessary experience and qualifications for this responsibility.

Name:

Title: Designated Dangerous Goods Official

ID Number:

Cell:

Landline:

Fax:

E-mail:

## 2.5 Duties of the Designated Dangerous Goods Official

- The formulation and implementation of the overall Procedures Manual for Shippers, Freight Forwarders and Cargo Operators for the company.
- The development and promulgation of companywide Dangerous Goods safety standards and practices to ensure that line management has the necessary direction and control
- The development and maintenance of the Procedures Manual for Shippers, Freight Forwarders and Cargo Operators including amendments.
- Conduct Dangerous Goods internal Quality audits.
- Report all dangerous goods accidents and incidents.
- Maintain dangerous goods incidents and accidents records.
- Establishing and maintaining effective liaison with the SACAA, airport authorities as well as other government and law enforcement agencies.
- Ensuring that effective risk analysis, threat assessment is conducted regularly and that there is sufficient response capability.
- The understanding of legislation and regulations relating to Dangerous Goods.
- Providing specialized advice to line management in all aviation safety functions regarding dangerous goods.
- Ensuring all staff dealing with dangerous goods and related documentation are trained and proper control of training records are established and maintained.
- Appoint persons authorized to be dangerous goods official in the respective branches of Company name (Pty) Ltd.

Signature: \_\_\_\_\_

Name:

Position: Designated Dangerous Goods Official

Date: \_\_\_\_\_

By his/her signature the incumbent accepts the duties and responsibilities mentioned above. The Appointment of Designated Dangerous Goods Official , is attached as Appendix B



**2.5.1 In addition to the Designated Dangerous Goods Official, it is recommended for organisations with multiple offices to have dangerous goods responsible individuals at branch or station level. The local Dangerous Goods official must be qualified in Dangerous goods Category 6.**

The main duties of the Local Dangerous goods official are to support and implement the duties of Designated dangerous goods official at the station level. In addition, the Local Dangerous Goods official shall have the following responsibilities:

- Shippers
- Operator

**2.5.2 The responsibilities of the above positions are as follows:**

**1. Shippers Responsibilities**

- Comply fully with the ICAO Technical Instructions for the safe transport of dangerous goods and any applicable regulations set forth by the States of origin, transit and destination.
- Must ensure that all persons involved are aware that offering articles or substances in violation of the regulations, is a breach of national law and may be subject to legal penalties
- Must provide information to the employees as will enable them to carry out their responsibilities with regard to the transportation of dangerous goods by air
- Must ensure that the articles or substances are not prohibited for transport by air.
- Must ensure that the articles or substances are properly identified, classified, marked, labelled, documented and are in the condition for transport in accordance with the regulations
- Must ensure that all relevant persons involved in preparation for a dangerous goods consignment offered for air transport have received training to enable them to carry out their responsibilities, as detailed in Subsection 1.5 of the IATA Dangerous Goods Regulations.
- Must ensure that dangerous goods are packed in compliance with all applicable air transport requirements in line with packing instructions.

**2. Operator's Responsibilities**

- Acceptance
- Loading
- Inspection
- Provision of information, including emergency response information
- Reporting
- Retention of Records
- Training

## **2.6 Visitors**

The identity of visitors shall be recorded and where visitors are required to enter areas where Dangerous Goods are handled, stored, packed or processed, such visitor will remain under escort by an authorised representative.

Visitors requiring access to Dangerous Goods areas shall be subject to search as to prevent the introduction of explosives, incendiary devices or any other prohibited or harmful articles which may be used to commit acts of unlawful

interference.

Parcels, bags or containers brought into security controlled areas by visitors shall either be prevented from taking such parcels, bags, containers into security controlled areas or such items shall be accounted for on exit.

### 2.6.1 Unauthorised Access

Where an unauthorised person is found having access to Dangerous Goods areas, those goods will be inspected for any pilferage, leakage and or damage before being delivered by road to the airport or delivered from the warehouse to the aircraft.

In any such event of unauthorised access to Dangerous Goods areas, appropriate steps shall be taken without delay to prevent further breaches to the security system.

Where an unauthorised person is detected in the Dangerous Goods areas controlled area the following actions shall be taken:

- The person should be challenged. If it is regarded as not safe, the assistance of the security department and or police must be sought.
- The identity of the person should be established.
- The area where Dangerous Goods are kept that is intended for carriage by air shall be regarded as contaminated/unsecured.
- The area, including Dangerous Goods stored in the area shall be subjected to security controls (which may include a thorough search/inspection) as to confirm that Dangerous Goods especially intended for carriage by air is secure.
- The SACAA shall be notified of the incident within 48 hours.

### 2.8 Premises, staff and access control and control of permits

Adequate physical barriers, such as fences, security gates and doors shall be installed as to Physical barriers shall be of such nature that unauthorised access will be detected and prevented.

This will include the following:

- All shipping and receiving doors shall be closed and locked or guarded when not in use
- All shipping and receiving doors shall be equipped with intrusion detection devices Where intrusion detection devices are not installed other means of protection against intrusion shall be used
- Access to Dangerous Goods areas shall be restricted to authorized persons with an operational need
- Access control shall be exercised at specific access control points, there being no other means of access into the premises other than through that point or points.
- Each access control point shall be staffed, effectively monitored or secured.
- The outer perimeter shall be clearly defined through physical barriers.
- The inner perimeter shall be clearly defined through physical barriers.
- Staff authorized to have unescorted access to controlled areas shall be issued with passes/permits.
- Visitors shall at all times be escorted if required to enter controlled areas within the cargo facility.

- A permit control process shall be implemented to approve and control the issuance, use and recovery of passes/permits.

### 3. OPERATIONAL PROCEDURES

Company name (Pty) Ltd will apply systems and methods to ensure that dangerous goods in their care are properly identified, classified, packed, accepted, labeled, handled, documented, stored and conveyed on an aircraft engaged in commercial air transport operations in a safe manner.

#### 3.1 Classification

Dangerous Goods are defined as those goods which meet the criteria of one or more of **9 UN Hazard Classes** and where applicable, to one of **3 UN Packing Groups**. The **9 Classes** relate to the type of hazard. Some Dangerous Goods classes are further subdivided into divisions. Some articles or substances may have more than one hazard to indicate the various hazardous characteristics.

Dangerous Goods are assigned to the relevant **Packing Group** according to the degree of Danger they present as follows:

- Packing Group I - High Danger
- Packing Group II- Medium Danger
- Packing Group III- Low Danger

**NOTE: It is the Shipper's responsibility to identify and classify all Dangerous Goods intended for transport by road and air in compliance with regulations**

**Caution:** for complete details refer to the current dangerous goods regulations or company operations manual.

Class / Div	IMP Code(s)	Description
1.4 B, C, D, E, G, S	RXB, RXC, RXD, RXE, RXG, RXS	Explosives
	REX	Explosives, normally forbidden (1.1, 1.2, 1.3 (not C and G), 1.4F, 1.5 & 1.6)
1.3C	RCX	Explosives
1.3G	RGX	Explosives
2.1	RFG	Flammable gas
2.2	RNG (and RCL if applicable)	Non-flammable, non-toxic gas (and cryogenic liquid)
2.3	RPG	Toxic gas
3	RFL	Flammable liquid
4.1	RFS	Flammable solid
4.2	RSC	Spontaneously combustible
4.3	RFW	Dangerous when wet
5.1	ROX	Oxidizer
5.2	ROP	Organic peroxides
6.1	RPB	Toxic substances
6.2	RIS	Infectious substances
7	RRW RRY	Radioactive material I-White Radioactive material II-Yellow and III-Yellow
8	RCM	Corrosive material
9	RMD ICE MAG RSB RLI (ELI) RLM (ELM)	Miscellaneous dangerous goods Dry ice Magnetized material Expandable Polymeric Beads / Plastics Moulding Compounds Lithium ion batteries: Class 9 (Section II - excepted) Lithium metal batteries: Class 9 (Section II - excepted)
Misc.	RDS REQ RRE AVI PER, FIL, HEG	Biological substance, Category B Dangerous goods in excepted quantities Radioactive material, excepted package Live animals Perishable cargo (includes PES, PEM, EAT, etc.), undeveloped film, hatching eggs

### 3.2 Acceptance

A dangerous goods consignment will only be accepted by Company name (Pty)Ltd under the following conditions:

- Only Company name (Pty) Ltd trained Staff and or third party staff that is trained on Dangerous Goods Category 6 shall do acceptance duties.
- Collections from clients must be done by drivers trained on Dangerous Goods.
- The goods are properly packaged with no evidence of leaking, tampering
- Proper documentation is available. That is, the airwaybill and a Shippers Declaration with the full name and address of Shipper and Consignee which will assists in terms of handling, loading and transporting of the dangerous goods as well as what exactly will be required in terms of emergency so as to aid response to any aircraft incident or accident

If the goods have been identified with the following:

- UN Number (United Nations Number)
- Class Division or Number
- Packing Group

The following is also critical:

- Number and Type of Packages

### 3.3 Packing

It is the responsibility of the Shipper to ensure that the Dangerous Goods where applicable are packed correctly as follows:

Single Packaging	Packaging which do not require any inner packaging in order to perform their containment function during transportation
Inner Packaging	Packaging for which an outer packaging is required for transport
Outer Packaging	The outer protection of a composite or combination packaging together with components necessary to contain and protect inner receptacles or inner packaging
Combination Packaging	A combination of packaging for transport purposes, consisting of one or more inner packaging secured in an outer packaging
All Packed in One	Different classes of COMPATIBLE Dangerous Goods which are packed into one outer packaging
Over pack	An enclosure used by a single shipper to contain one or more packages of compatible Dangerous Goods and to form one handling unit for convenience of handling and storage

### 3.4 Labelling/Identification/Marking

The Shipper is responsible for all necessary markings and labelling of Dangerous Goods in compliance with the Regulations.

Proper Shipping Name – Dangerous Goods are assigned to UN Numbers and proper shipping names according to their hazard classification and their composition.

All labels must meet the quality and specification requirements of the Regulations and must be affixed in the correct location and in a secure manner. All markings must be visible, legible and so placed that they are not covered or obscured in any way

Required Markings are:

- UN Number And Proper Shipping Name
- Full Name and Address of Shipper and Consignee
- Hazard Label – must bear the Class and division number if applicable in the bottom corner label. Unless otherwise provided in the DGR, Hazard text indication the nature of the risk may be inserted in the lower half of the hazard label in addition to the hazard class, division or compatibility group
- Handling Label – give an additional information on how to handle, store or load Dangerous Goods
- The net quantity (for Class 1 and Dry Ice too) of Dangerous Goods contained in each package must be shown adjacent to the UN Number and Proper Shipping Name with the letter “G”
- For Infectious Substance (Blood, etc.) the Name and Telephone Number of Responsible Person
- For Class 2 – DO NOT DROP – HANDLE WITH CARE
- UN3373: BIOLOGICAL SUBSTANCE CATEGORY B”

- The word "SALVAGE" to be used when transporting packages into which damaged, defective, leaking or non-conforming Dangerous Goods packages, or Dangerous Goods that have spilled or leaked and are placed for the purpose of transport for recovery or disposal
  - Consolidated packages – multi packages from more than one person
- "Not Restricted" – if the package does not fall into the criteria of classification

**NOTE :** Should the any of the above points be overlooked, the consignment will be rejected and returned to the Shipper immediately

### 3.5 Documentation

There are three documents which accompany all shipments of Dangerous Goods:

1. **Shipper's Declaration for Dangerous Goods** – must be completed in English and in duplicate. Cannot be altered or amended unless the alteration has been signed by the Shipper with the same signature used to sign the document. When Dry Ice is used as a refrigerant for Dangerous Goods, the details of the dry ice must be shown on the Shipper's Declaration
2. **Air Waybill** – Handling Information is required i.e. Air Waybill must have the following information: Dangerous Goods as per attached shipper's declaration or Dangerous Goods as per attached DGD. Where dangerous goods are for the cargo aircraft only, the words "Cargo Aircraft Only" or CAO must be added. An airway bill containing both Dangerous and Non-Dangerous Goods should indicate the number of pieces of Dangerous Goods
3. **NOTOC (Notification to Captain)** – This is the responsibility of the operator or the appointed agent
4. **Additional Information** – when shipments are shipped under exemption, a copy of the exemption must accompany the consignment

### 3.5 Prohibited Articles

The following shall be considered as prohibited articles:

- Assembled explosive and incendiary devices that are not carried in accordance with the applicable safety rules
- Live Intentionally Infected Animals or suspected to contain infectious substance

### 3.6 High Consequence Dangerous Goods

High consequence dangerous goods accepted into the facility will be stored in an area that is covered by CCTV. Where it is not possible to store such commodities in areas covered by CCTV, measures will be implemented to maintain constant surveillance over such commodities while under the care and control of the organisation. Subject to the size and quantity of the consignment and where such consignment is required to remain overnight, the police authorities will be notified of the presence of such commodities.

Any loss or theft of high consequence dangerous goods will without delay be brought under the attention of the designated official. The incident shall be reported to the Civil Aviation Authority and followed up with a written report

within 48 hours.

High Consequence Dangerous Goods are received from approved and known clients that declare the contents and ensure that goods are packaged properly. If the goods are not properly packaged, Company name (Pty)Ltd will send goods to Dangerous Goods Packaging Packers for repackaging.

### 3.7 Arms & Ammunition

Company name (Pty)Ltd does not handle Arms and Ammunition.

Any Arms and Ammunition detected during the acceptance or handling of cargo shall be stopped and the police authorities shall be notified. The incident shall be reported to the Civil Aviation Authority and followed up with a written report within 48 hours.

*Note: Ammunition can be transported in line with the recommendations of the ICAO Technical Instructional for safe Transport of Dangerous Goods or the IATA dangerous Goods regulations manual*

### 3.8 Other Articles - Lifesaving Drugs & Human Organs

All above items shall be required to be:

- a) Clearly declared on shipping documents as such;
- b) Physically checked upon receipt for signs of tampering;
- c) Subjected to documentary checks to establish on face value the correctness and sufficiency of information on any document; and
- d) Protected from unauthorised interference.

The above items are also client specific and done with dedicated fleet and Standard Procedure.

Operating

### 3.9 Storage

- a) Company name (Pty)Ltd will have designated areas which have the following:
  - Fire extinguishers
  - Emergency Response Spill kits to store all Dangerous Goods
  - Display of Compatibility Chart/Segregation table
  - Display of Dangerous Goods signage with classes
- b) Dangerous Goods will not be packed close to each other and or on top of each other unless they are compatible as per the Compatibility Chart displayed on the cage
- c) Trained Staff and a Dangerous Goods official is to handle the storage in the branch

### 3.10 Transportation and Loading

- a) Only closed vehicles which protect the Dangerous Goods from sunlight will be used to transport Dangerous Goods to the airport
- b) Only trained Staff will collect the Dangerous Goods and transport them to Company name (Pty)Ltd warehouses
- c) Packages with Radioactive Material must be handled with care as far as possible from the person in order to maintain the principle of keeping exposure to radiation as low as possible

### 3.11 Inspection for Damage and Leakage

- a) Company name (Pty)Ltd before accepting the package will inspect them for damage and or leakage
- b) If the package is damaged and or is leaking –the Shipper must be notified immediately to come and collect the package for proper packaging.
- c) Should a package be damaged and or leaking whilst in the care of Company name (Pty)Ltd – the following needs to be done:
  - Avoid handling the package
  - Inspect adjacent packages for contamination and put aside any that have been contaminated
  - Do not clean the area
  - Report to the supervisor who should in turn report to the Dangerous Goods Official

### 3.12 Reporting of Damaged and Leaking Dangerous Goods

- a) Inform the Manager who will arrange for a chemical cleaning organisation to collect and dispose
- b) Notify the Shipper and or the Consignee
- c) Notify authorities (airport authorities, Aviation authorities, the operator)
- d) If the package contains infectious substances, notify Health authorities as well
- e) If personnel was in contact with the contents of the package, the following must be done:
  - Wash with water

### 3.13 Undeclared or Mis-declared Dangerous Goods

- a. In cases where dangerous Goods are not identified correctly, and on occasion where Shippers do not declare Dangerous Goods or declare them as general cargo in order to avoid extra costs, the shipper shall be liable for all damages and costs in case of an incident. Such cases shall be reported to the SACAA.



- b. Should you come across an undeclared or mis-declared Dangerous Goods, inform the Manager who will in turn inform the Designated Dangerous Goods Official/ Manager who will in turn inform the Civil Aviation Authority

### 3.14 Dangerous Goods Accident and Incident Reporting

Should a Dangerous Goods incident or accident occur on a public road and or airport, the incident or accident shall be reported to:

- SA Civil Aviation Regulations within 48hrs
- The nearest police station is informed
- The airport authorities

### 3.14 Dangerous Goods Acceptance By Air

Dangerous Goods Acceptance personnel shall;

1. Verify the identity of the driver / person tendering Dangerous Goods against agreed supplied identification.
2. Verify all documentation (i.e. Shipper's Declaration, Air Waybill etc.).
3. Verify the Dangerous Goods against accompanying documentation.
4. Ensure that the Consignor supply a complete description of the contents of the goods.
5. Check consignments for signs of tampering.
6. Sign the declaration and make necessary endorsements on such documentation if applicable.
7. Where Dangerous Goods appear to have been subject to significant tampering to a degree which could have allowed for the introduction of a prohibited article, or is otherwise suspect such goods shall be handled as high risk goods.
8. Should any irregular behavior or activity by the driver or person tendering Dangerous Goods be observed take appropriate action
9. Confirm the status of the Dangerous Goods being received Exempted / Dangerous Goods by posing questions to the Driver / person tendering goods and verifying endorsements on supplied documentation.

### 3.15 Verification of the List of Regulated Agents

During the acceptance of Dangerous Goods acceptance Staff shall verify received cargo against the current regulated agent list as to establish if the cargo is tendered by and approved regulated agent.

Dangerous Goods tendered by an agent that does not appear on the list of approved regulated agents shall be treated as high risk. Provided that transfer or transit cargo arriving by air shall be treated in accordance with the procedures contained under transfer and transit cargo.

### 3.16 Random and Unpredictable Security Controls

Random and unpredictable security controls will periodically be applied over and above baseline security controls. This will include:

- Physical opening and verification of the contents of against accompanying documentation.

- A phone call to the shipper as to confirm if the shipper is the originator of the goods and to confirm the contents.

### **3.17 Examining and Completing of shipping documentation**

The completion and shipping documentation shall be conducted by suitably trained and background checked staff. During the acceptance of any cargo consignment, acceptance staff will examine received documentation to establish the correctness and sufficiency of information

### **3.18 Dangerous Goods Audit Trail**

Records shall be maintained either manually or in electronic format showing at least the following detail:

- Consignee and Consignor detail
- description of the goods
- Security controls applied to such consignments
- Whether the consignment was accepted or declined

Records shall be maintained for a period not less than one year.

### **3.19 Rejected/Returned Dangerous Goods**

Where Dangerous Goods are rejected during delivery, the integrity of such Dangerous Goods will be maintained such goods will be returned under secure transportation to the appropriate storage facility. Where the integrity of such goods is not maintained, such goods will be retained and subjected to inspection. SACAA and other relevant local authorities shall be notified. All incidents and accidents shall be recorded and kept on file.

### **3.20 Risk/Vulnerability Assessments**

Frequency of vulnerability assessments: Bi-annually or when an incident occurred requiring the re-assessment of security measures and systems.

The Designated Dangerous Goods Official or authorised representative will conduct vulnerability assessments.

Copies of these assessments as well as the documented proof of action taken are available at our offices for the SACAA's perusal.

### **3.21 Protection of IT Systems**

Computers and other electronic equipment are used for most operations and any sustained loss of power may result in negative effects on the business. The Uninterrupted Power Supply (UPS) systems is installed for most IT equipment to ensure business can continue as normal as possible in case of a power outage

## 4. RECORD KEEPING

### 4.1 Shipping documents

The following shipping documents will be maintained for a period not less than one year:

- a. Shipper's Letter of Instructions
- b. House Air waybills
- c. Master Air waybills
- d. Dangerous Goods Manifests
- e. Air waybill assignments – Forms of Undertaking
- f. Shipping documents
- g. Copies of shippers declarations
- h. NOTOCs if issued
- i. Acceptance checklist (if applicable)

### 4.2 Safeguarding, storage and maintenance of records

Documents are securely stored in lockable cabinets and or lockable offices and access to such documentation is controlled and restricted to authorised personnel only.

### 4.3 Personnel Records

Personnel records are securely stored in lockable cabinets and or lockable offices and access to such documentation is controlled and restricted to authorised personnel only.

These documents shall be made available upon request by the authorities, i.e. SACAA

### 4.4 Quality Management System

Company name (Pty) Ltd shall apply a quality management system to ensure the sustained effectiveness of the Dangerous Goods security procedures as contained in this manual. Such quality management system shall cover areas of document control, record keeping, internal auditing, and control of non-conforming aspects and the introduction of corrective and preventative action.

## 5. TRAINING

### 5.1 Training

All operators must establish a training program regardless of whether or not they are approved to transport Dangerous Goods as Cargo.

Dangerous Goods Training programme must be reviewed and approved by the appropriate authority of the state of the operator.

Personnel must be trained and assessed commensurate with the functions for which they are responsible prior to performing any of these functions.

A training program must include elements such as methodology, assessment, initial and recurrent training, instructor qualifications and competencies, training records and evaluation of the effectiveness of training. This training shall be conducted by a SACAA approved and accredited organisations

Regular updating of staff about Dangerous Goods procedures shall be conducted by the National DG Official or delegated to appropriate staff in the form of circulars and briefings.

## 5.2 TRAINING PROGRAMME FOR PERSONNEL THAT ARE INVOLVED IN DANGEROUS GOODS HANDLING

### 5.2.1 Approval of Training Programmes (CAR Part 92.00.8)

*Insert company name* hold approval for training programmes in the carriage of dangerous goods by air in accordance with **CAR Part 92, 92.00.8 (7)**. This training is identified and described in the following text. Any substantive changes to this training (or proposals for sourcing training from an alternative external company) must be submitted to the Dangerous Goods Department of the SACAA for the training approval to remain valid.

**Editorial Note 1:** *Prior to outsourcing the provision of dangerous goods training, operators must establish that the proposed training materials are approved by the SACAA.*

**Note:** *All training for Dangerous Goods within the Republic shall only be provided by a dangerous goods training organisation designated by SACAA in terms of Part 141.*

### 5.2.2 General Requirements Applicable to Dangerous Goods Training Programmes

To ensure that everyone involved is aware of their responsibilities in the transport of dangerous goods, no matter whether such goods are carried as cargo or are in the possession of passengers, training must be given so that awareness is gained of the hazards associated with dangerous goods and how they should be dealt with in air transport. Personnel identified in the categories specified in Table 1-4 / 1-5 of the ICAO Technical Instructions (extract produced below) must be trained or training must be verified prior to the person performing any duty specified in Table 1-4 / 1-5.

Recurrent/refresher training must be provided within 24 months of previous training, calculated from last date of successful completion of the initial dangerous goods training or preceding refresher dangerous goods training, as the case maybe.

As with other aviation qualifications an offence against the regulations will be committed if staff continue to work after their training qualification has expired.

A test to verify understanding must be undertaken following training and confirmation that the test has been completed satisfactorily is required. The records of training must be retained by the employer for a minimum period of 5 years as prescribed under SACAR Part 141 and must be made available upon request to the employee or the appropriate national authority.

## 5.3 Dangerous Goods Training Syllabus

The areas to be covered for various categories of personnel are listed within the table below; the depth of training required for each area is dependent on the responsibilities of the individuals and varies from a general appreciation to in-depth knowledge so that decisions can be taken.

**Editorial Note:** The following table should be tailored to match the categories of personnel employed by Cargo handling organisation / Cargo Operator. Technical instructions Table 1-4 / 1-5 or IATA DGR Table 1.5.A / 1.5.B

Extract from Table 1-4 of the ICAO Technical Instructions (Content of Training Courses- DG Carriers)

	Categories of staff							
<i>Aspects of transport of dangerous goods by air with which they should be familiar, as a minimum</i>	1	2	6	7	8	9	10	11
General philosophy	X	X	X	X	X	X	X	X
Limitations	X		X	X	X	X	X	X
General requirements for shippers	X		X					
Classification	X	X	X					
List of dangerous goods	X	X	X				X	
Packing requirements	X	X	X					
Labelling and marking	X	X	X	X	X	X	X	X
Dangerous goods transport document and other relevant documentation	X		X	X				
Acceptance procedures			X					
Recognition of undeclared dangerous goods	X	X	X	X	X	X	X	X
Storage and loading procedures			X		X		X	
Pilots' notification			X		X		X	
Provisions for passengers and crew	X	X	X	X	X	X	X	X
Emergency procedures	X	X	X	X	X	X	X	X

**CATEGORY:**

- 1 - Shippers and persons undertaking the responsibilities of shippers.
- 2 - Packers.
- 6 - Operator's staff accepting dangerous goods.
- 7 - Operator's staff accepting cargo or mail (other than dangerous goods).
- 8 - Operator's staff involved in the handling, storage and loading of cargo or mail and baggage.
- 9 - Passenger-handling staff.
- 10 - Flight crew members, loadmasters, load planners and flight operations officer/flight dispatcher.
- 11 - Crew members (other than flight crew members).

Extract from Table 1-5 of the ICAO Technical Instructions (Content of Training Courses – Non DG Carriers)

	Categories of staff				
	13	14	15	16	17
<i>Aspects of transport of dangerous goods by air with which they should be familiar, as a minimum</i>					
General philosophy	X	X	X	X	X
Limitations	X	X	X	X	X
Labelling and marking	X	X	X	X	X
Dangerous goods transport document and other relevant documentation	X				
Recognition of undeclared dangerous goods	X	X	X	X	X
Provisions for passengers and crew	X	X	X	X	X
Emergency procedures	X	X	X	X	X

**CATEGORY:**

- 13 - Operator's staff accepting cargo or mail (other than dangerous goods).
- 14 - Operator's staff responsible for the handling, storage and loading of cargo or mail and baggage.
- 15 - Passenger-handling staff.
- 16 - Flight crew members, loadmasters, load planners and flight operations officer/flight dispatcher.
- 17 - Crew members (other than flight crew members).

**Note 1:** Depending on the responsibilities of the person, the aspects of training to be covered may vary from those shown in the table.

**Note 2:** The categories of personnel identified in Table 1-4 / 1-5 are all-encompassing. Personnel employed by or interacting with the aviation industry in areas such as passenger and cargo reservation centres, and engineering and maintenance. Employees should be provided with dangerous goods training commensurate with their specific responsibilities. See ICAO Technical Instructions 4; 2.1.

**5.4 Instructor Qualifications**

Instructors of initial and recurrent dangerous goods training programmes must have adequate instructional skills and have successfully completed a dangerous goods training programme in the applicable Category 6, prior to delivering such a dangerous goods training programme.

Instructors delivering initial and recurrent dangerous goods training programmes must successfully complete a category 6 refresher course within 24 months calculated from the date of completion of the initial course with an approved SACAA approved Aviation Training Organisation

**Editorial Note 1:** In addition to the above, Cargo handling organisation / Cargo Operator should detail the experience and aptitudes considered appropriate for the selection of trainers.

## 5.5 Identification of Training and Testing Materials

**Editorial Note 1:** Cargo handling organisation / Cargo Operator should detail the dangerous goods training and testing materials that have been subjected to approval for each category of personnel, so that they may be readily identified by trainers. The titles and revision numbers of presentations, videos, study books, handouts, visual aids and tests to verify understanding should be included. Additionally, the mark required to achieve a pass and procedures to be applied in the event that personnel do not achieve or maintain the required standards must be established.

**Editorial Note 2:** Tests to verify understanding must be conducted in a controlled environment that prevents collaboration.

## 5.6 Issuance of certificate (CAR 92.00.8 (5))

Upon successful completion of the initial dangerous goods training or the refresher Dangerous goods training, the dangerous goods training organisation concerned shall issue to the candidate a certificate in the handling of dangerous goods to be conveyed by air.

## 5.7 Competency Cards (CAR 92.00.31)

All personnel who have received training and are current in Dangerous Goods training shall be issued with a competency card and shall carry the card with them at all times while on duty.





**APPENDIX B  
APPOINTMENT LETTER AND QUALIFICATIONS OF DESIGNATED DANGEROUS GOODS OFFICIAL**

APPENDIX C  
EMERGENCY REPOSE CHART

**Dangerous Goods Emergency Response Chart**

Hazard Class Division and Compatibility Group	Dangerous Goods Class	Hazard Description	Immediate Action Minimise leakage and contact with other cargo	
1.3C 1.3G	Explosives (Acceptable on Cargo Aircraft only)	Fire and minor blast hazard and/or minor propulsive hazard	Notify Fire Department  Guard Against fire	
1.4B 1.4C 1.4D 1.4E 1.4G		Fire, But no other Significant hazard		
1.4S		Small fire hazard		
2.1 2.2 2.2		Flammable Gas Non-Flammable Gas Cryogenic Liquid		Notify Fire Department Evacuate goods Ventilate area Keep away Minimum 25 m
2.3		Toxic Gas (acceptable on Cargo Aircraft only)		
3	Flammable Liquid	Ignites when leaking	Notify Fire Department Do not use water under any circumstances	
4.1 4.2 4.3	Flammable Solid Spontaneously Combustible Dangerous when wet	Combustible, contributes to fire Ignites in contact with air Ignites in contact with water		
5.1 5.2	Oxidizer Organic Peroxide	Ignites combustibles on contact Reacts violently with other substances		Notify Fire Department Do not use water
6.1 6.2	Poison  Infectious Substance	Harmful if swallowed, inhaled or in contact with skin  Causes disease in Humans and Animals	Isolate area Obtain qualified assistance Do not touch	
7 Cat I 7 Cat II/III	Radioactive – White Radioactive – Yellow	Radiation hazards and h Harmful to health	Keep away Minimum 25 m	
8	Corrosive	Hazardous to skin and metal	Notify Fire Department Avoid contact with skin	
9	Polymeric Beads Magnetized Material Dry Ice Miscellaneous Dangerous Goods	Evolves small quantities of flammable gas Affects navigation system Causes sub cooling/suffocation Hazards not covered by other classes	Avoid contact with skin No immediate action required	

APPENDIX D  
SEGREGATION TABLE/COMPATIBILITY CHART

**Segregation chart**

IMP	CL / Div.	RCK	REK	RXB	RXC	RXD	RXE	RVG	RFG	RNG	RCL	RPG	RFL	RSC	RFW	RDX	ROP	RCM	AMI	PER	FIL	HES
	CL / Div.	1.3C	1.3B	1.4B	1.4C	1.4D	1.4E	1.4G	2.1	2.2	2.2	2.3	3	4.2	4.3	5.1	5.2	8				
RCK	1.3C			X					X	X	X	X	X	X	X	X	X					
REK																						
RXB	1.4B	X			X		X		X	X	X	X	X	X	X	X	X					
RXC	1.4C																					
RXD	1.4D																					
RXE	1.4E																					
RVG	1.4G																					
RFG	2.1	X	X	X	X	X	X	X														
RCL	2.2	X	X	X	X	X	X	X											X			X
RPG	2.3	X	X	X	X	X	X	X											X		X	X
RFL	3	X	X	X	X	X	X	X								X						
RSC	4.2	X	X	X	X	X	X	X										X				
RFW	4.3	X	X	X	X	X	X	X														
ROX	5.1	X	X	X	X	X	X	X					X	X								
ROP	5.2	X	X	X	X	X	X	X														
RCM	8	X	X	X	X	X	X	X							X							
RY	7																		X		X	X
RPB	6.1																		X		X	X
RIS	6.2																		X		X	X
ICE	9																		X		X	X
HUM																			X		X	X

\* HUM should not be loaded in close proximity to live animals and foodstuff.

\*\* For complete segregation and separation distances, refer to your company operations manual.

\*\*\* An "X" at the intersection indicates packages containing these classes/divisions require segregation. Classes not included do not require segregation.

**APPENDIX E  
DG POSTERS EXAMPLE**

> Basic information on **Dangerous Goods Handling**

### Hazard and Handling Labels

**Class 1**

\* Articles bearing the Explosive labels shown above and falling into Divisions 1.1, 1.2, 1.4F, 1.5 and 1.6 are normally forbidden.




**Class 2**      **Class 3**

**Class 4**      **Class 5**

**Class 6**      **Class 7**

**Class 8**      **Class 9**

**Handling Labels**

DEVELOPED BY:		
	THAMI ZEMBE	15 MAY 2017
SIGNATURE OF MANAGER: DANGEROUS GOODS	NAME IN BLOCK LETTERS	DATE
REVIEWED & VALIDATED BY:		
	NICO SMIT	15 MAY 2017
SIGNATURE OF SENIOR MANAGER: DANGEROUS GOODS & CARGO SECURITY	NAME IN BLOCK LETTERS	DATE
APPROVED BY:		
	LUVUYO GOEKE	15 MAY 2017
SIGNATURE OF EXECUTIVE: AVSEC	NAME IN BLOCK LETTERS	DATE